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PRINTED: 01/23/2002

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: MYSTIC GOLD

ALTERNATE NAMES:

MARICOPA COUNTY MILS NUMBER: 122A

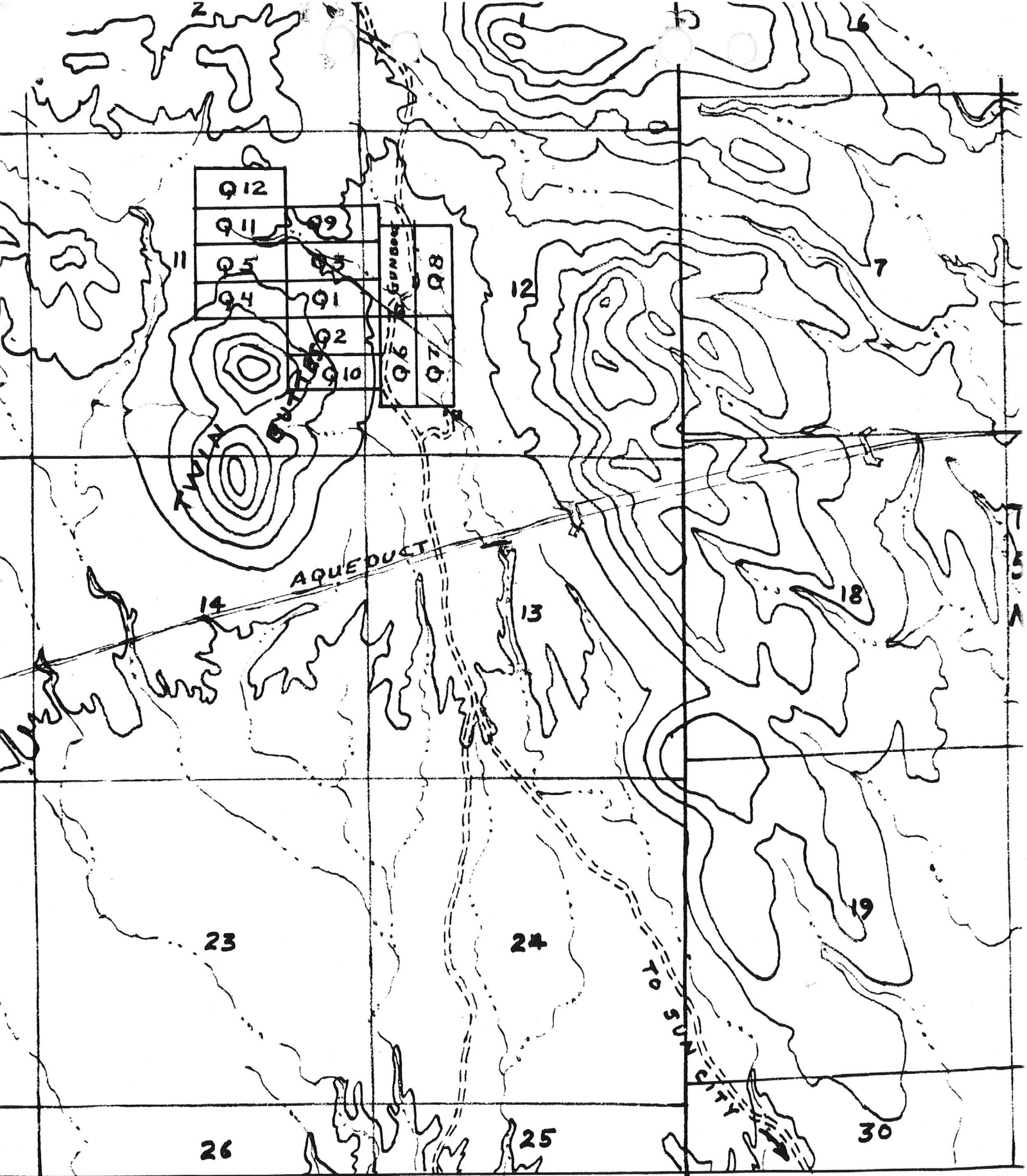
LOCATION: TOWNSHIP 5 N RANGE 1 W SECTION 12 QUARTER SW
LATITUDE: N 33DEG 47MIN 04SEC LONGITUDE: W 112DEG 19MIN 11SEC
TOPO MAP NAME: BALDY MTN - 7.5 MIN

CURRENT STATUS: DEVEL DEPOSIT

COMMODITY:
- GOLD LODE
- ZINC OXIDE
- LEAD OXIDE
- SILVER
- COPPER

BIBLIOGRAPHY:

- ADMMR MYSTIC GOLD FILE
- AGS 1990 FALL FIELD TRIP GUIDE



SCALE 1:24,000

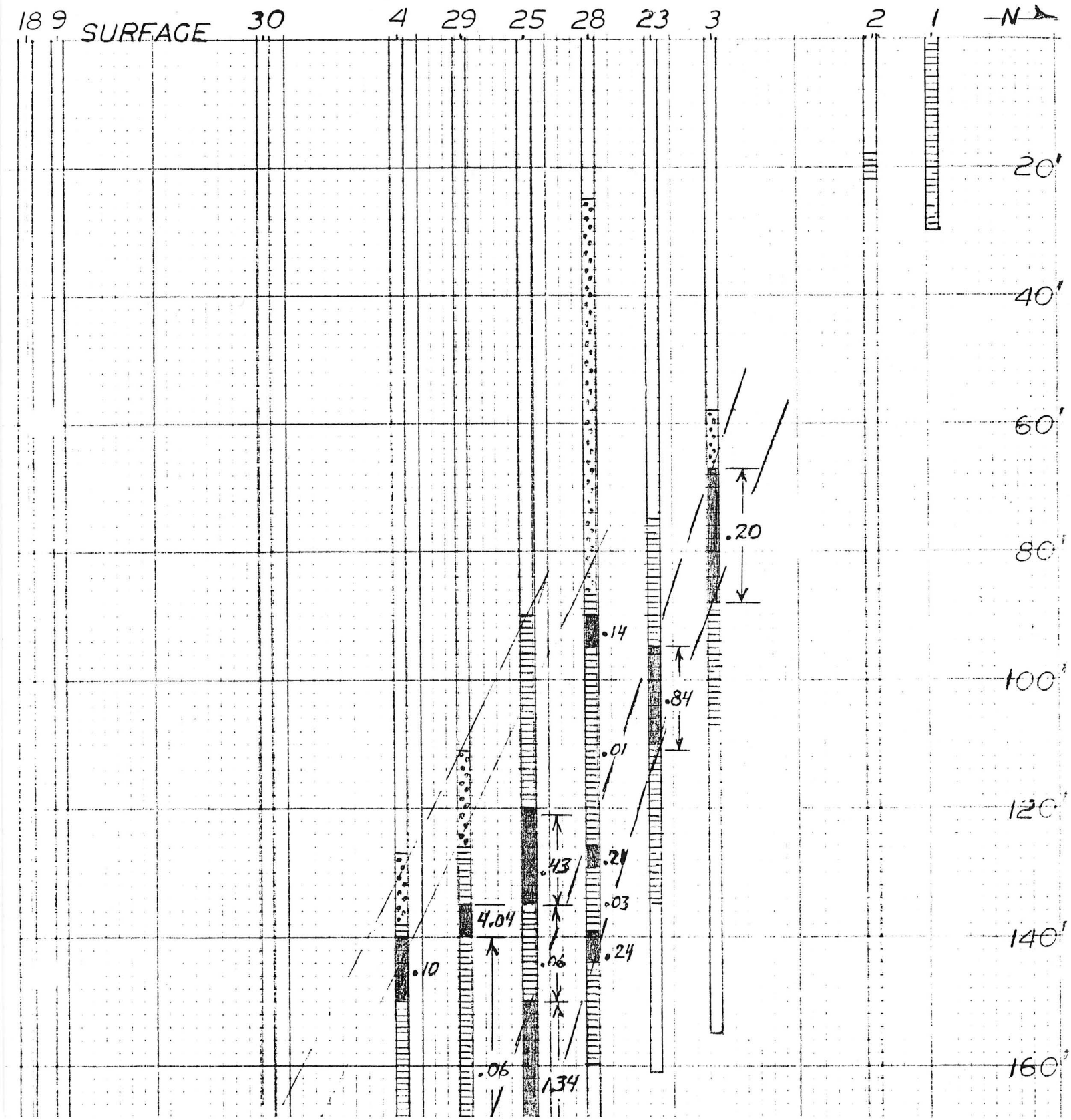
1 1/2 0 1 MILE

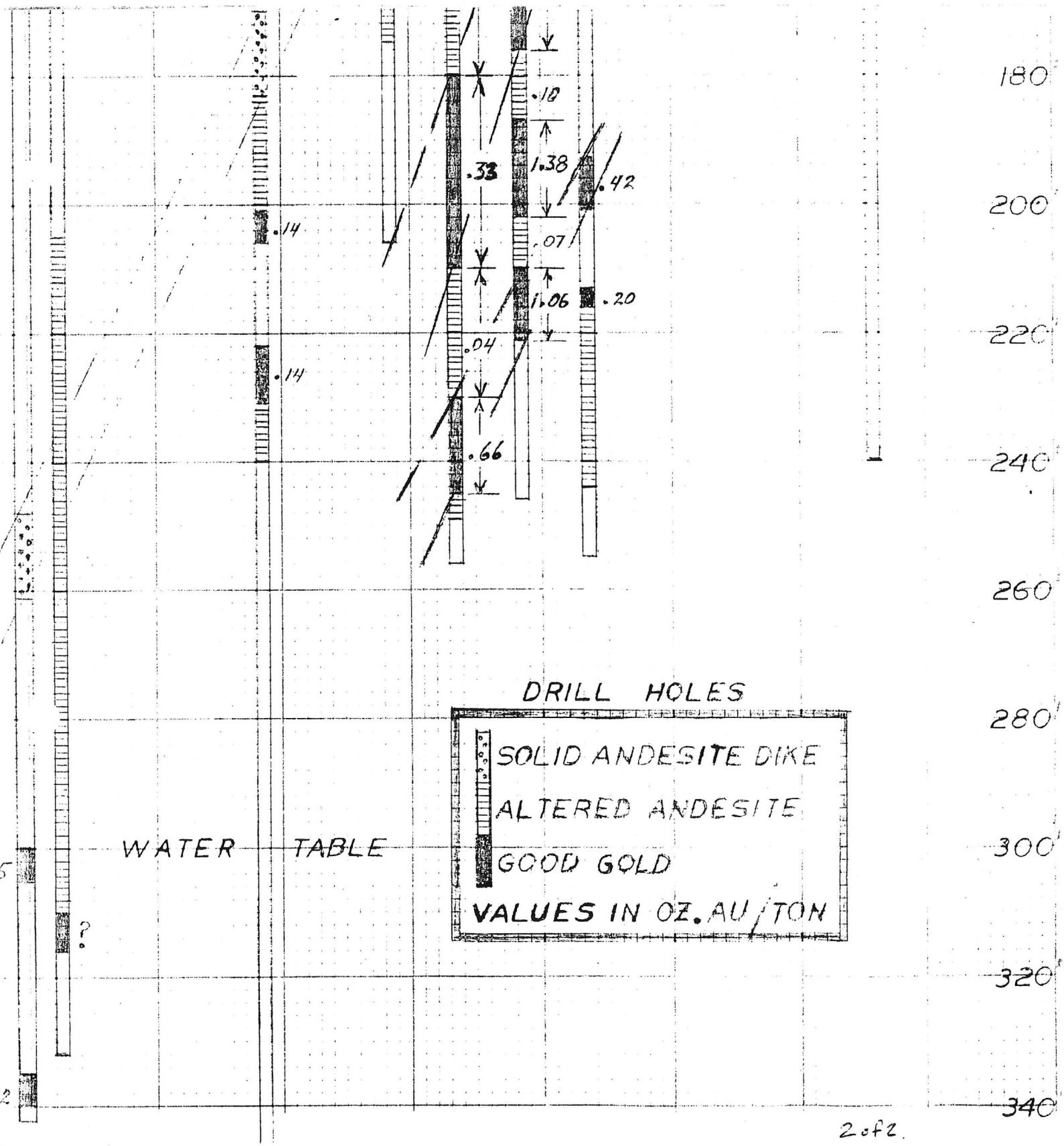
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

Base from BALDY MT. quad.

Contour interval is 100 feet.

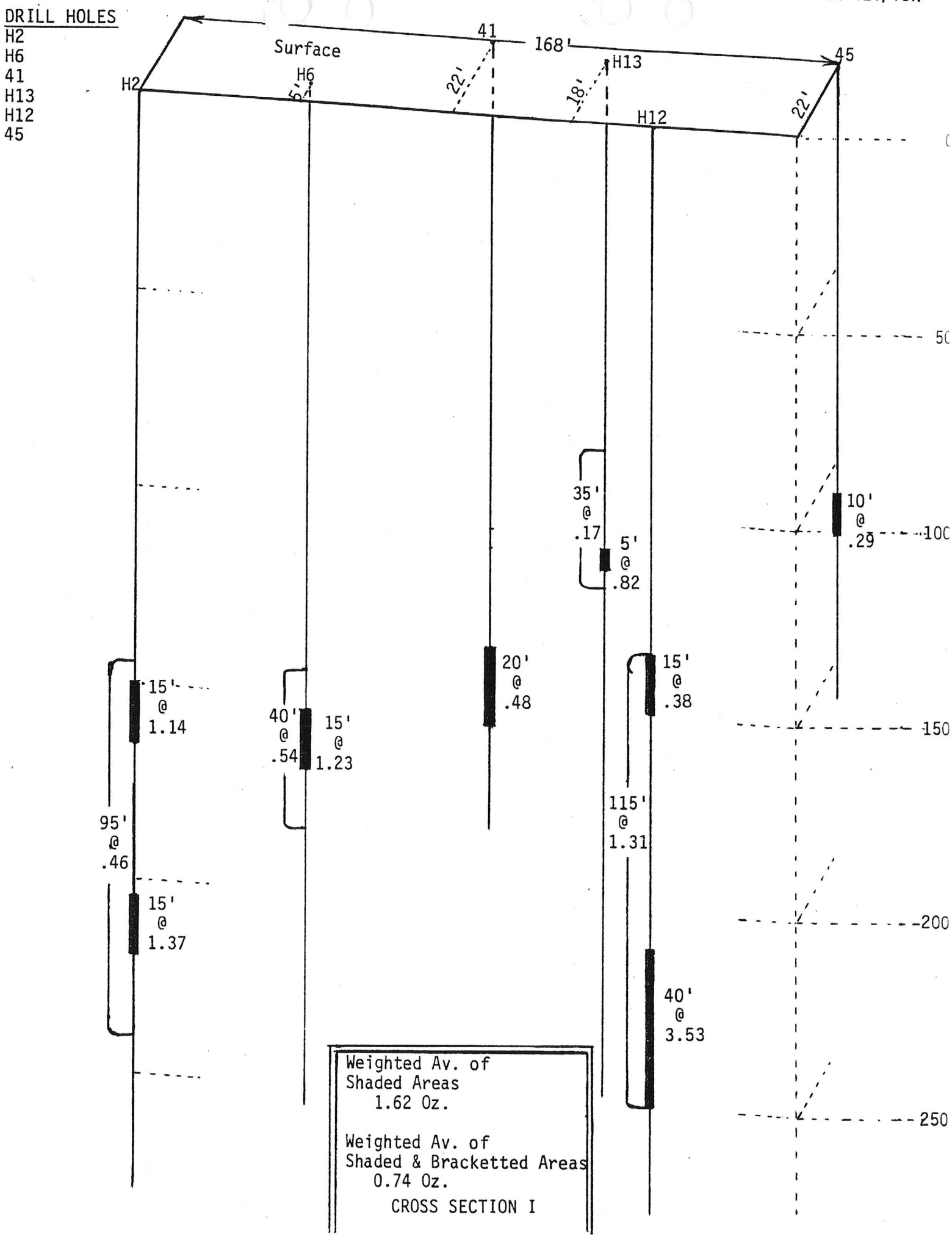
PROPERTY DATA IS APPROXIMATED


18
9
SURFACE
30
4
29
25
28
23
3
2
1
N
20'
40'
60'
80'
100'
120'
140'
160'
.20
.14
.84
.01
.43
.24
.03
4.04
.24
.10
.06
.06
1.34


180
200
220
240
260
280
300
320
340
.10
.33
1.38
.42
.14
.07
1.06
.20
.04
.14
.66
?
WATER TABLE
DRILL HOLES
SOLID ANDESITE DIKE
ALTERED ANDESITE
GOOD GOLD
VALUES IN OZ. AU/TON

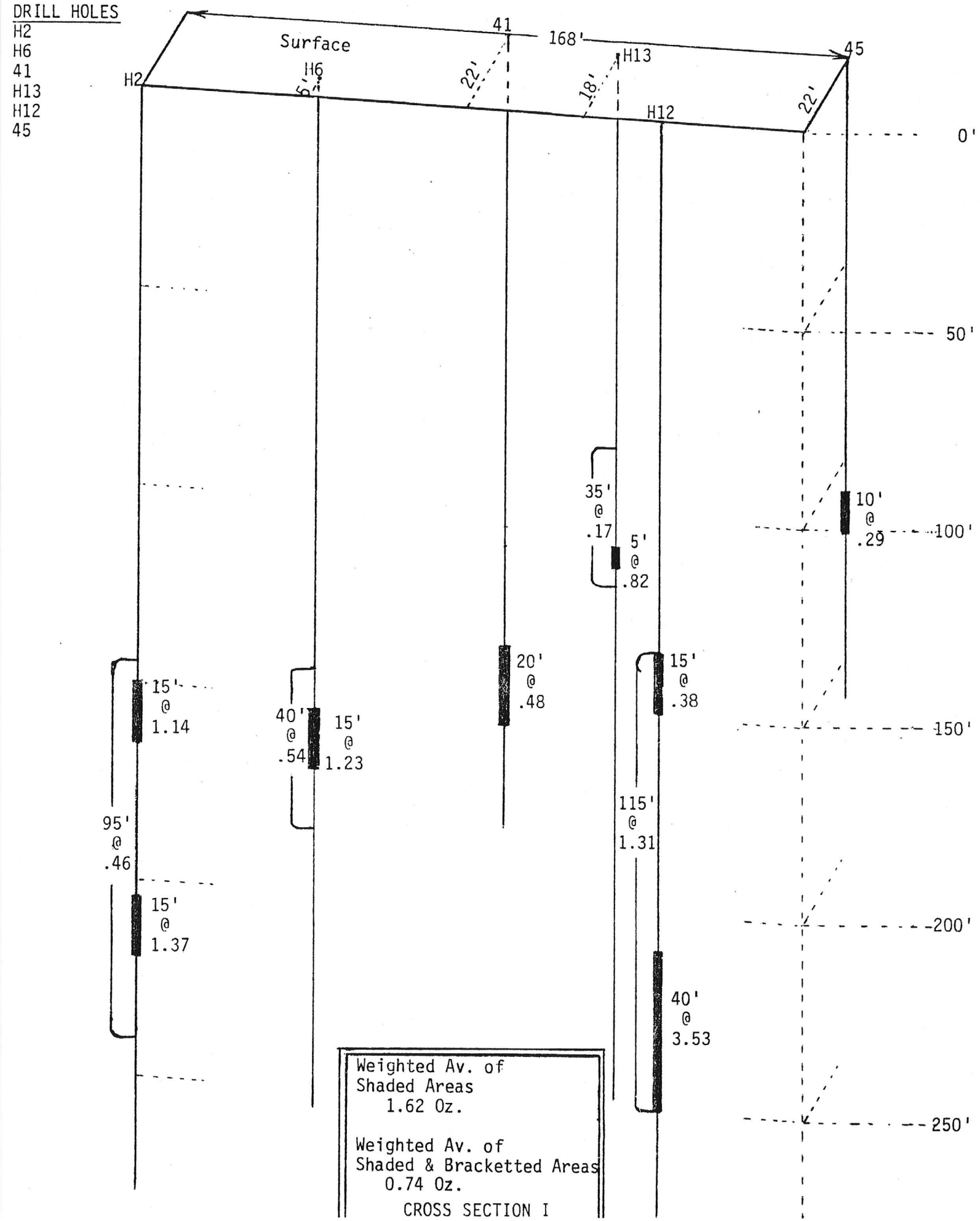
CROSS SECTION I -SELECTED HOLES ALONG APPROXIMATE STRIKE-LINE

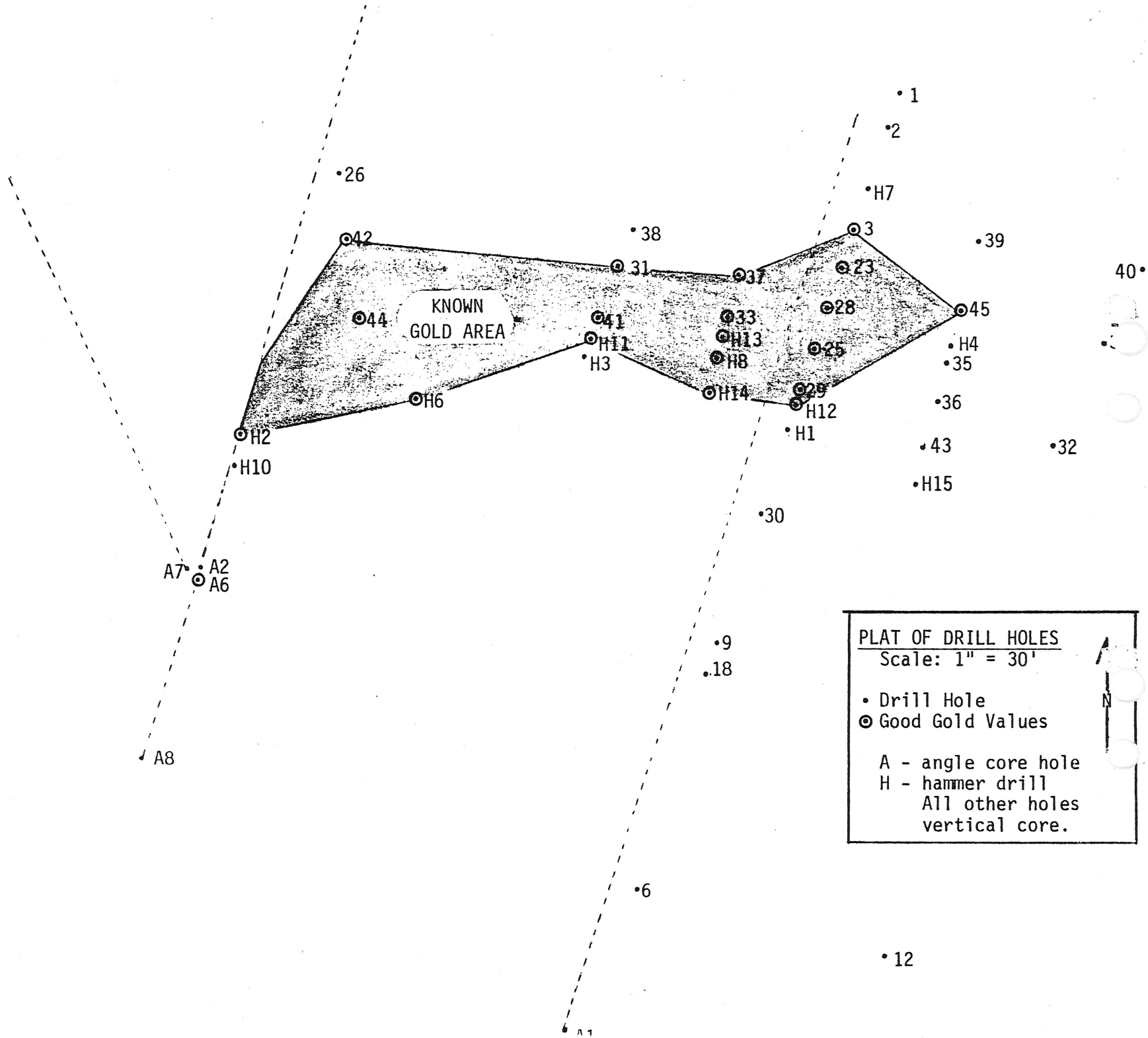
Scale: 1" = 30'
Gold in Oz./Ton

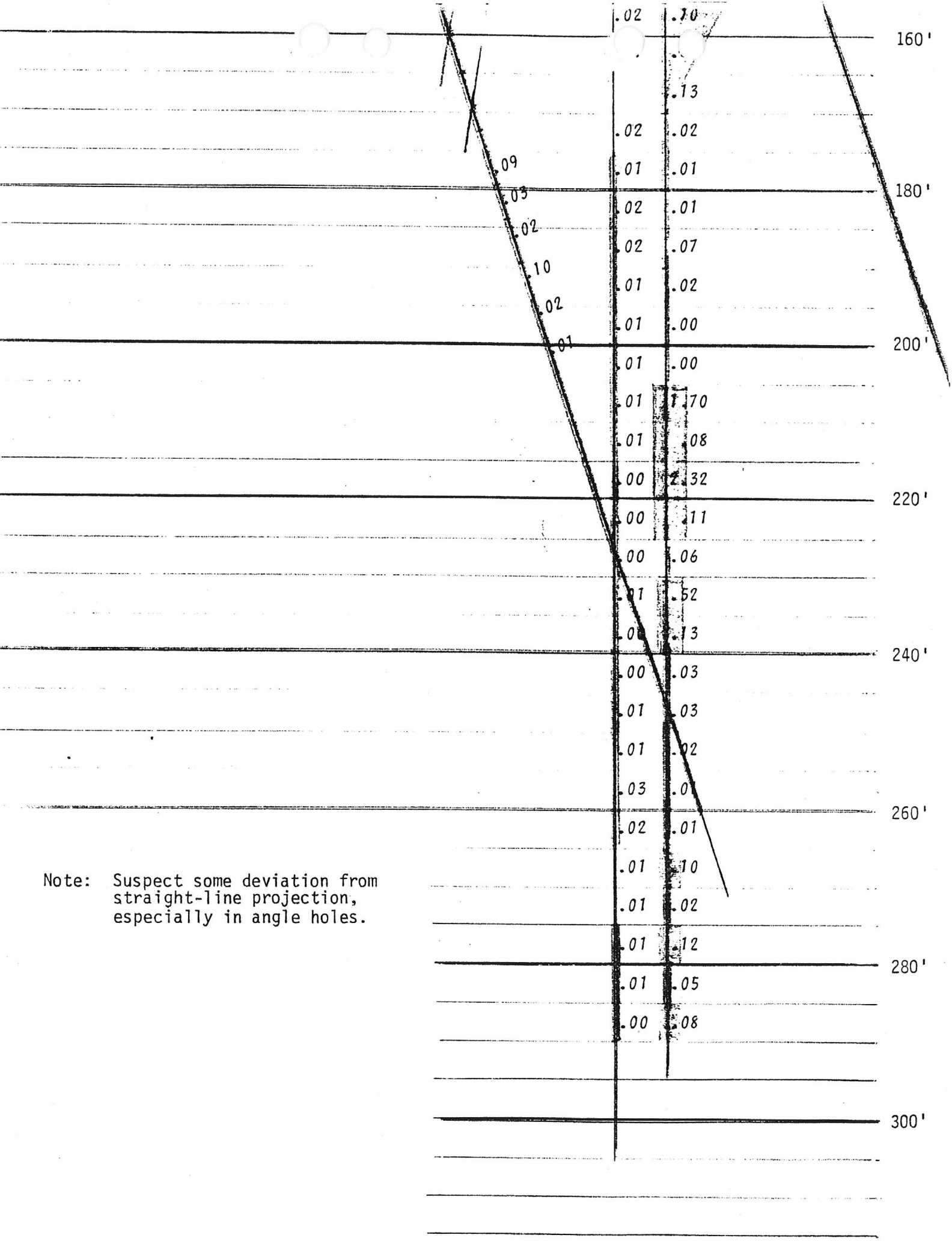


CROSS SECTION II -SELECTED HOLES ALONG APPROXIMATE STRIKE-

Scale: 1" = 30'
Gold in Oz./Ton



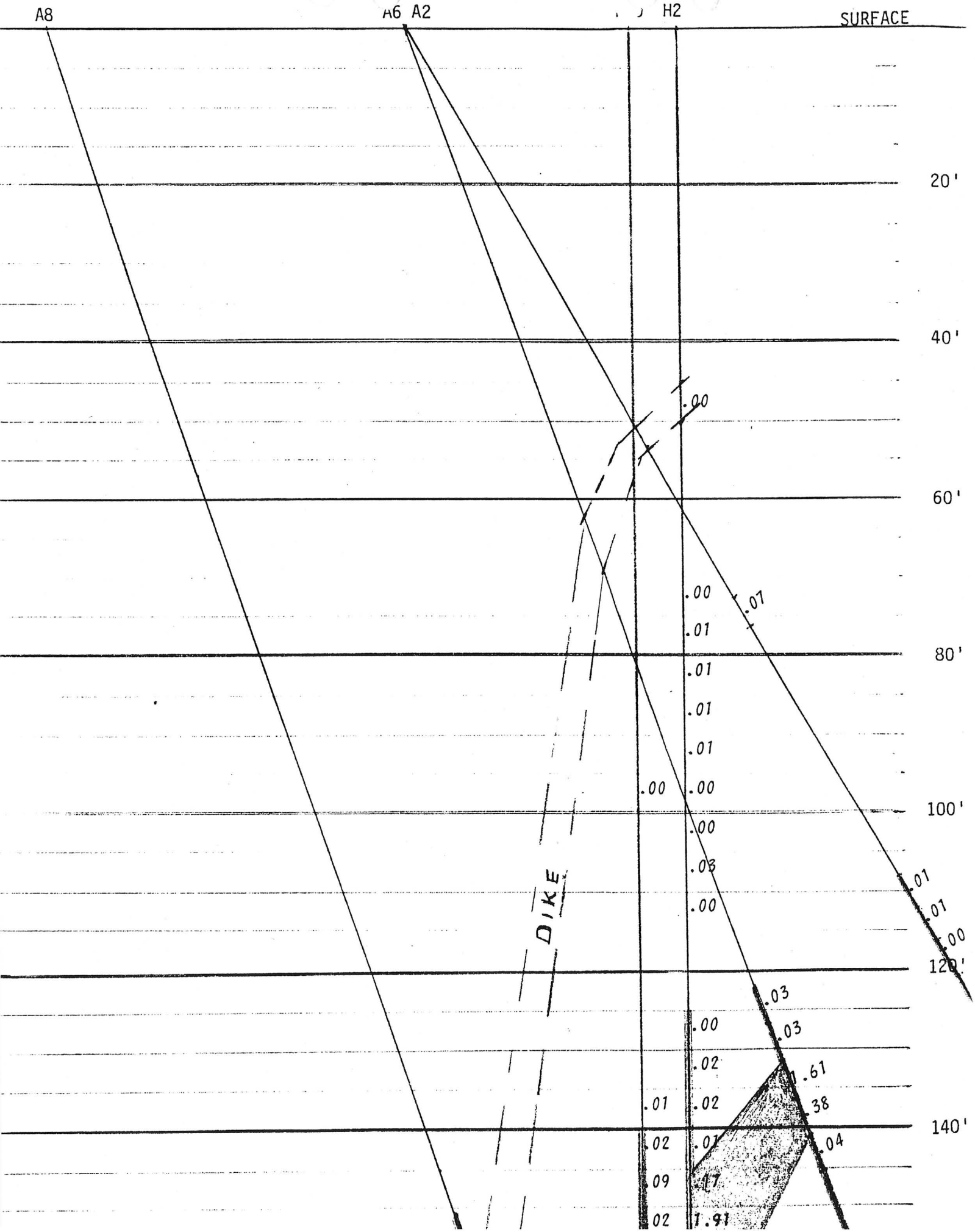

KNOWN
GOLD AREA
1
2
26
H7
42
38
3
39
31
37
23
40
44
41
33
28
45
H11
H13
H4
H3
H8
25
35
H6
H14
29
36
H12
H2
H1
43
32
H10
H15
30
A7
A2
A6
9
18
A8
PLAT OF DRILL HOLES
Scale: 1" = 30'
• Drill Hole
⊙ Good Gold Values
A - angle core hole
H - hammer drill
All other holes
vertical core.
N
6
12

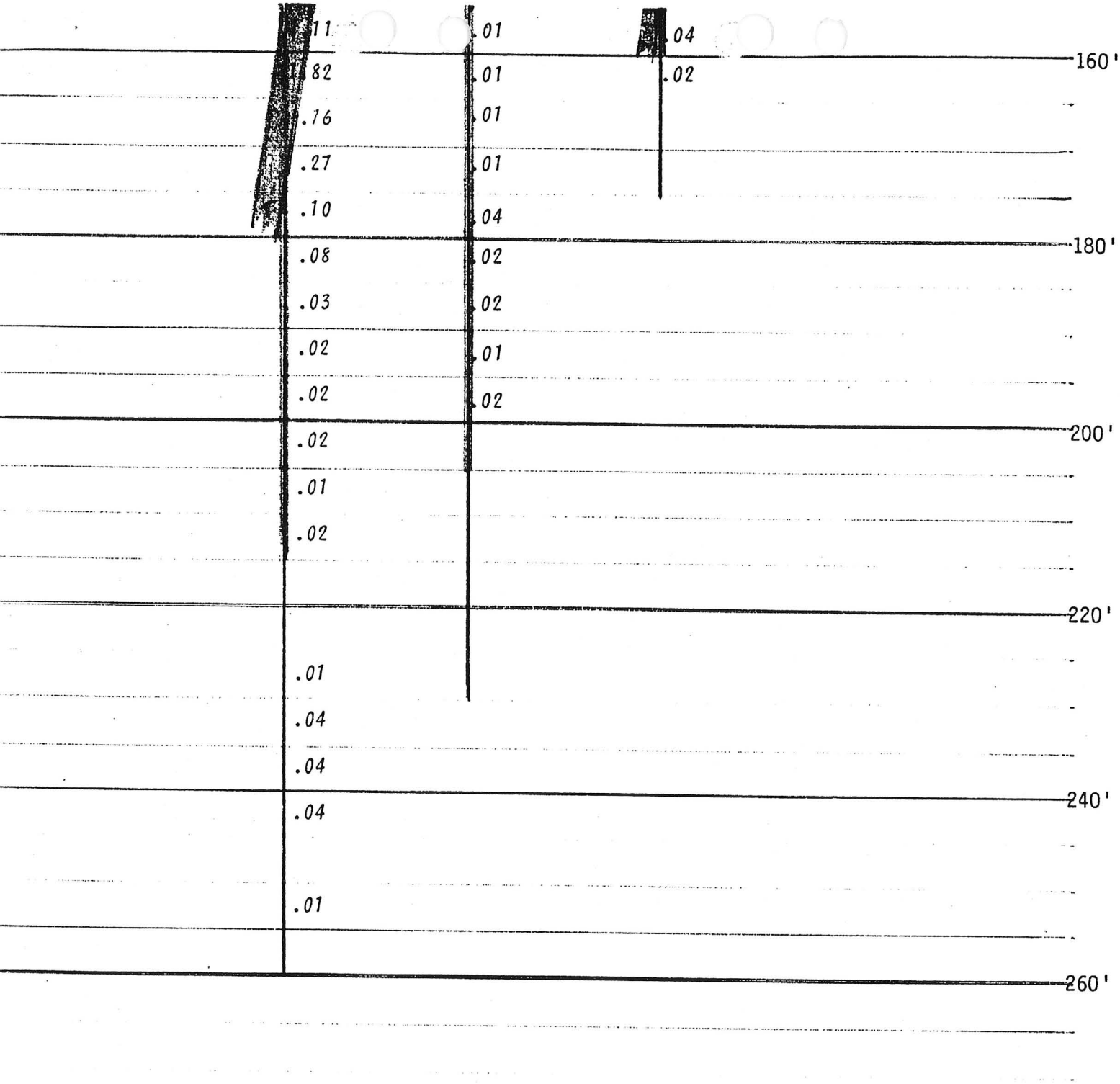


Note: Suspect some deviation from straight-line projection, especially in angle holes.

CROSS SECTION II

CROSS SECTION II DRILL HOLES & AU in OZ./T 1" = 15'





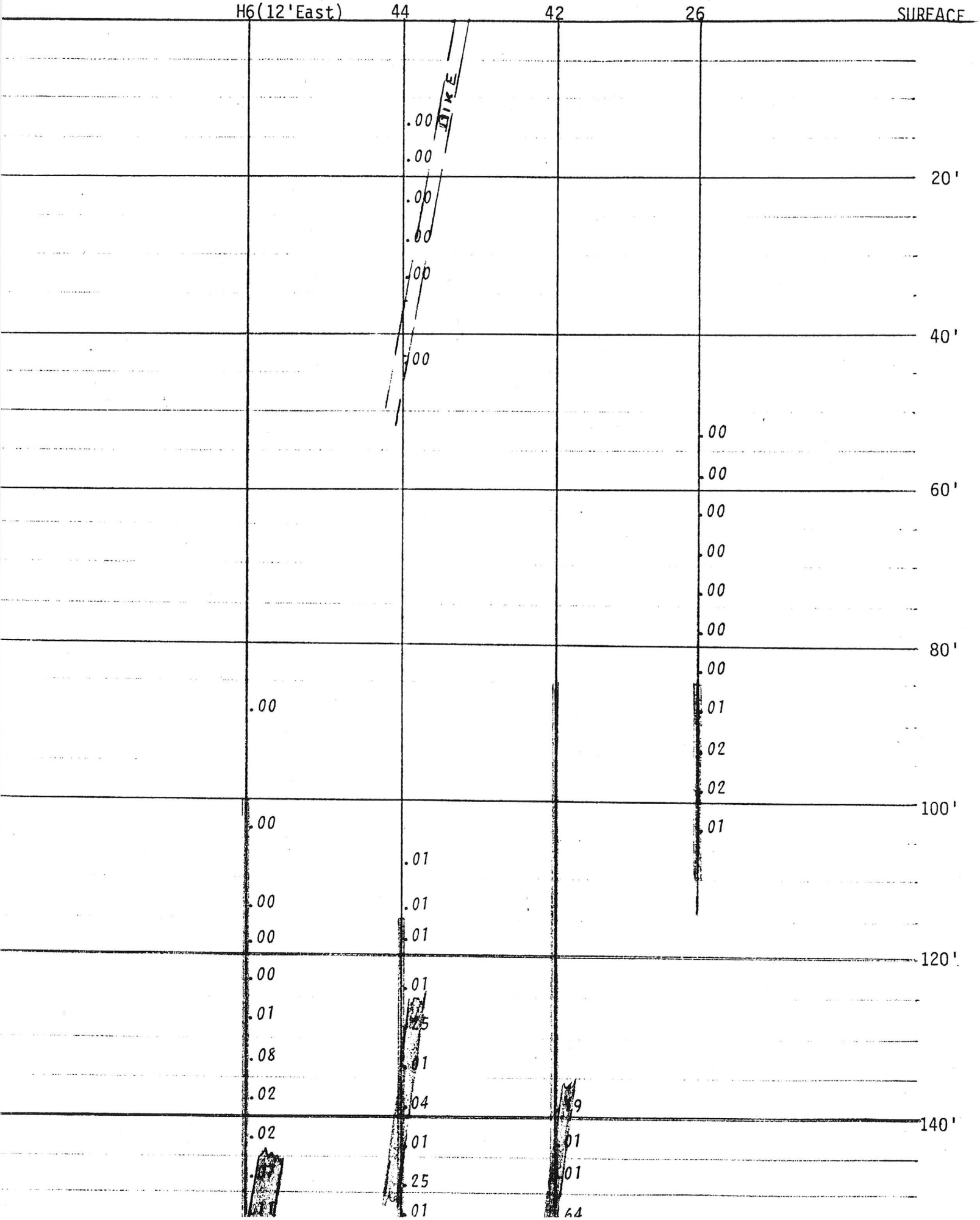
Best Tests:

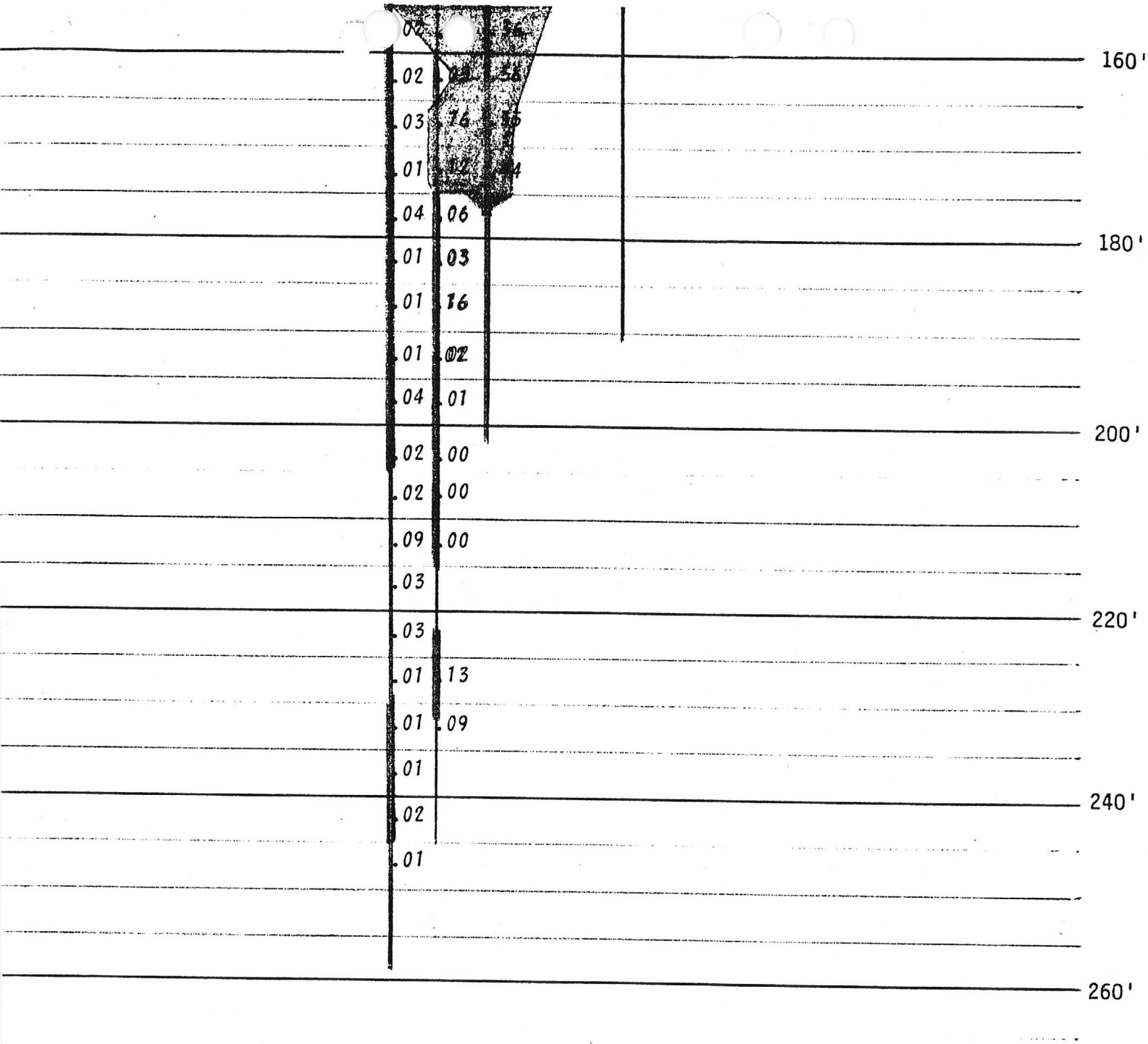
	.11	.25		.19
	1.11	.01		.01
	1.82	.04		.01
	.76	.01		.64
	.27	.25	Av. 20'	.21
Av. 25'	.81 oz.	.11		

NOTE: Angle of Dip or Dips not ascertained.
Shaded areas approximate dip of DIKE near surface.

CROSS SECTION III

CROSS SECTION III DRILL HOLES & AU in OZ./T 1" = 15'

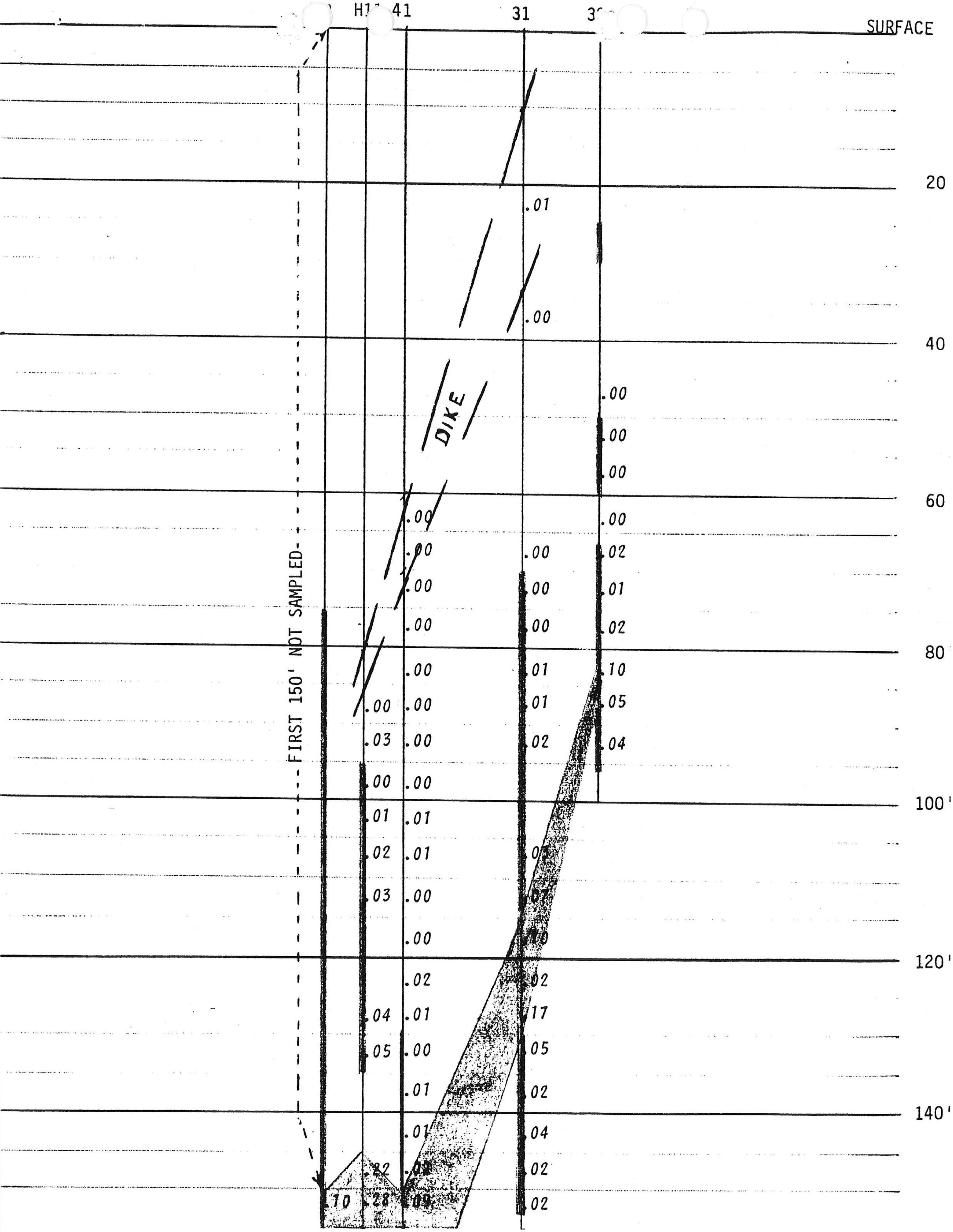


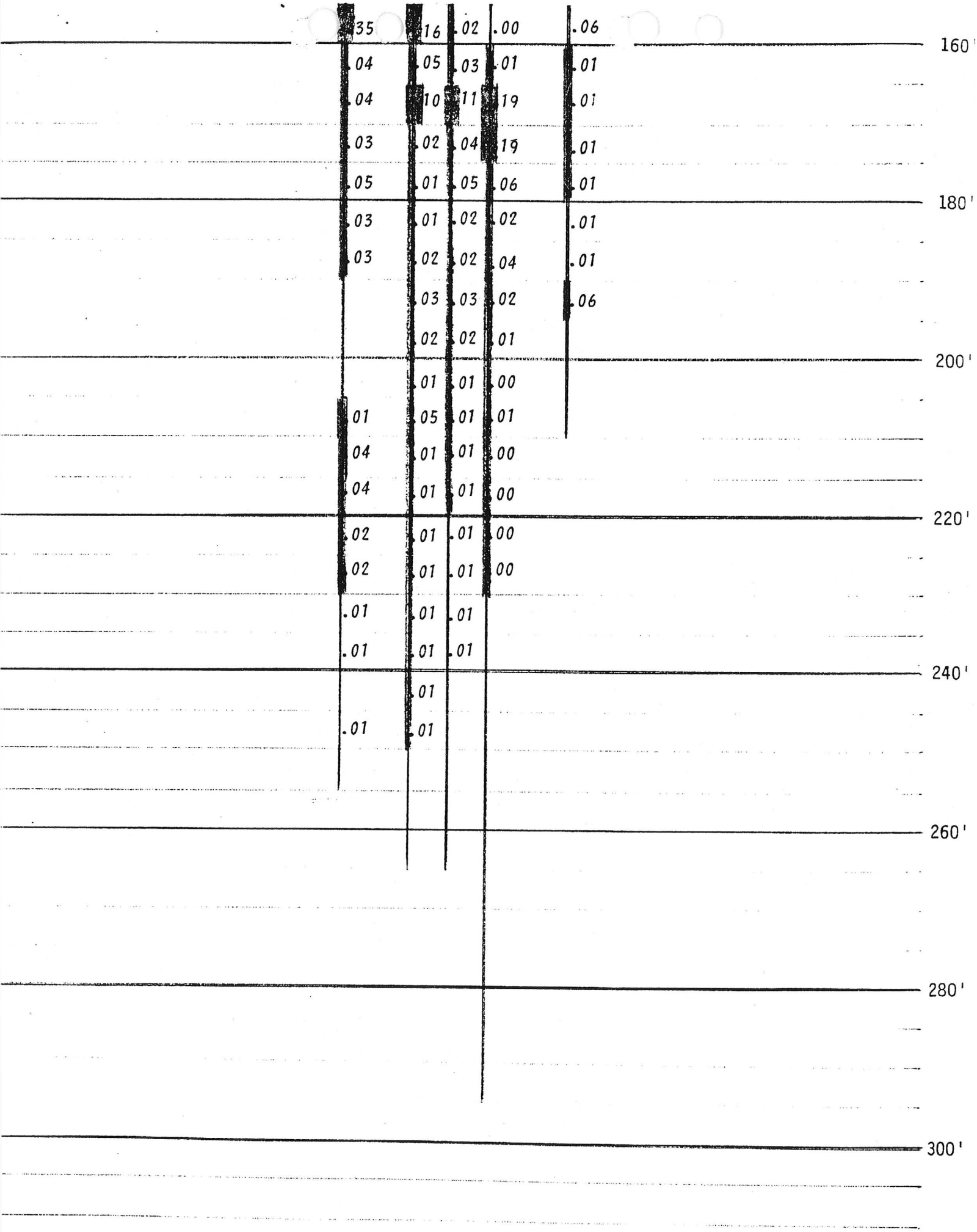


Simple Average of 15 samples in shaded area = 0.26 Oz.
Five deepest samples in shaded area (.58, .55, .44, .76, .12) Av. 0.49

CROSS SECTION IV

CROSS SECTION IV   DRILL HOLES & AU in OZ./T   1" = 15'



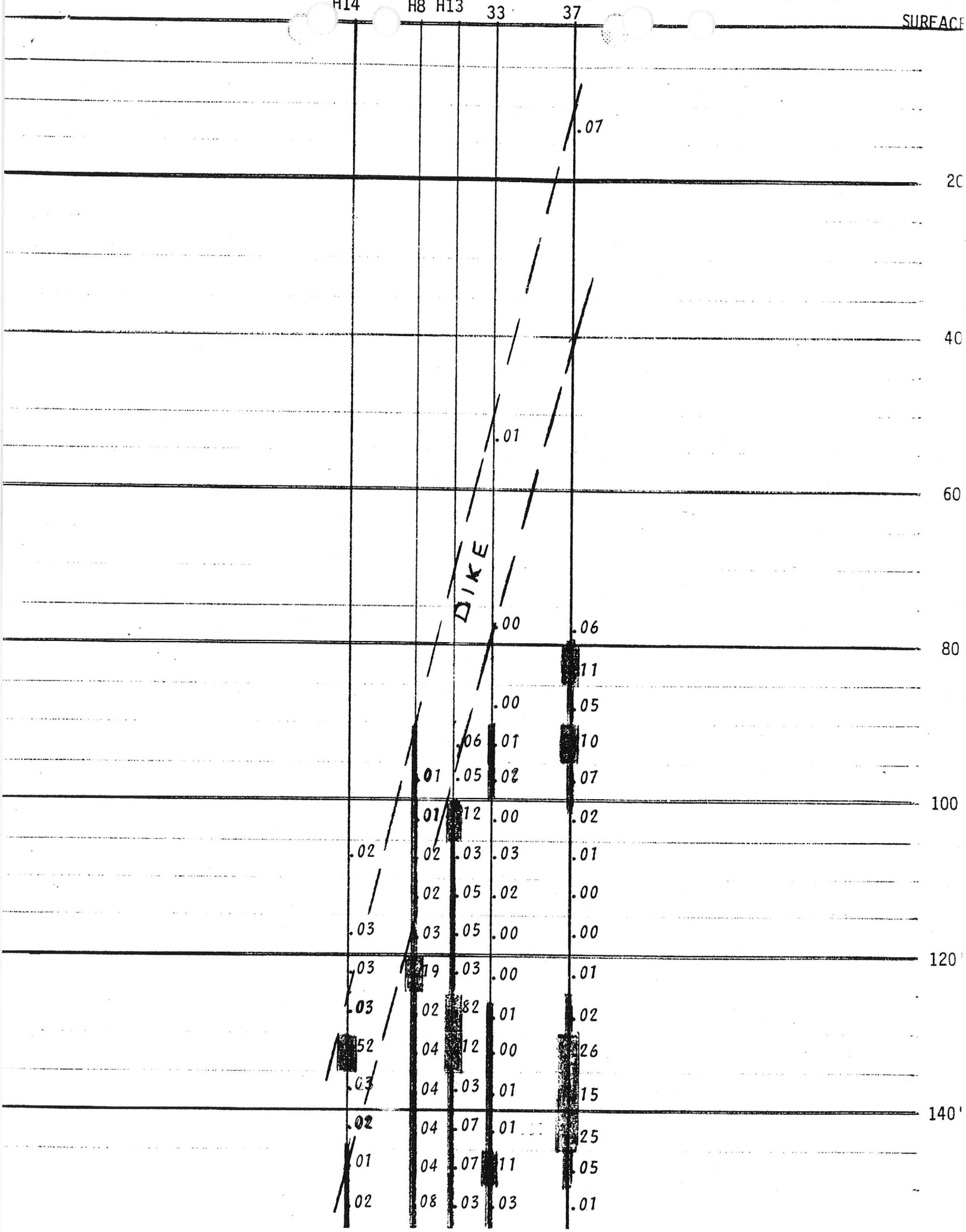


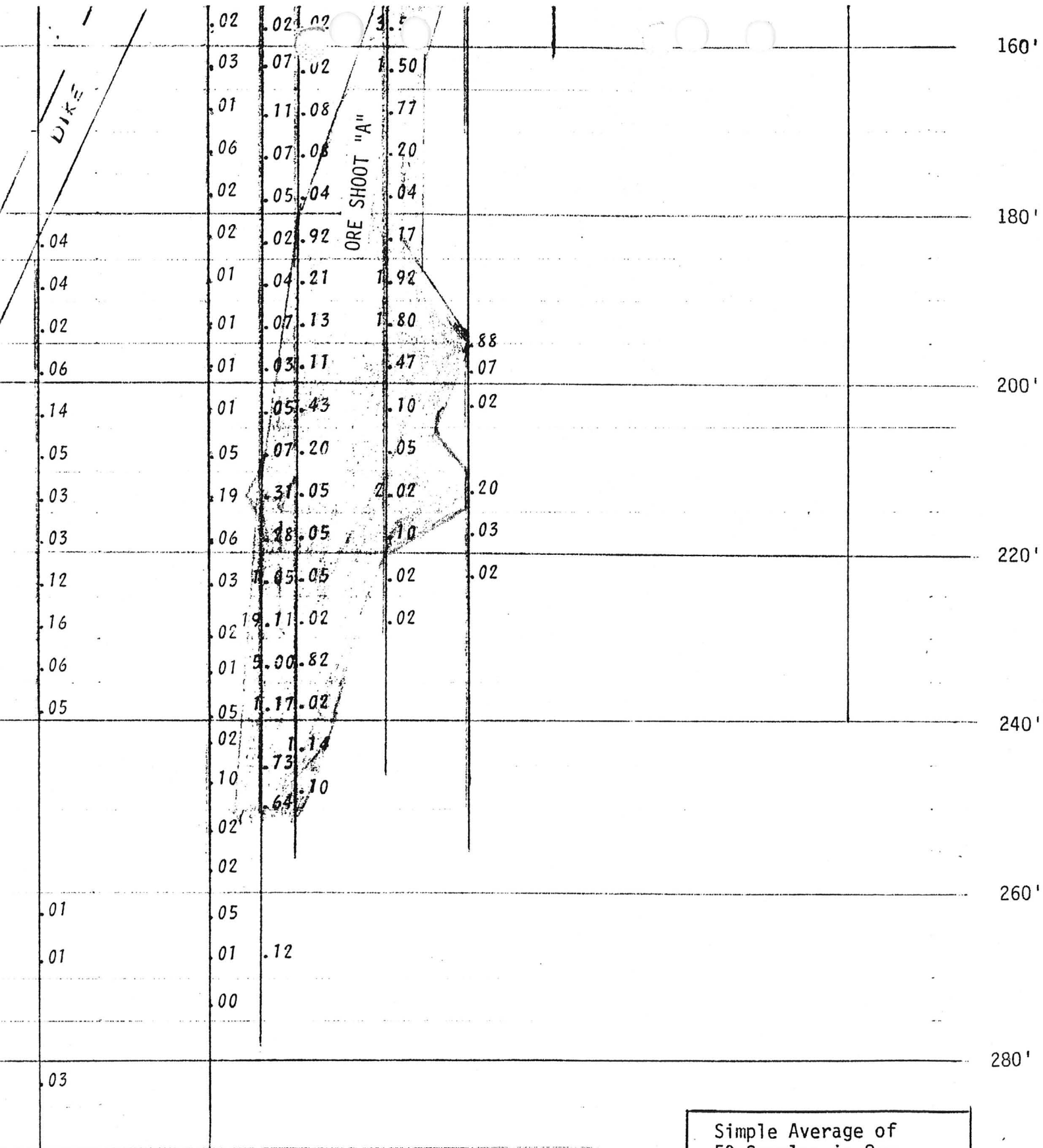
CROSS SECTION V

CROSS SECTION V

DRILL HOLES & AU in OZ./T

1" = 15'



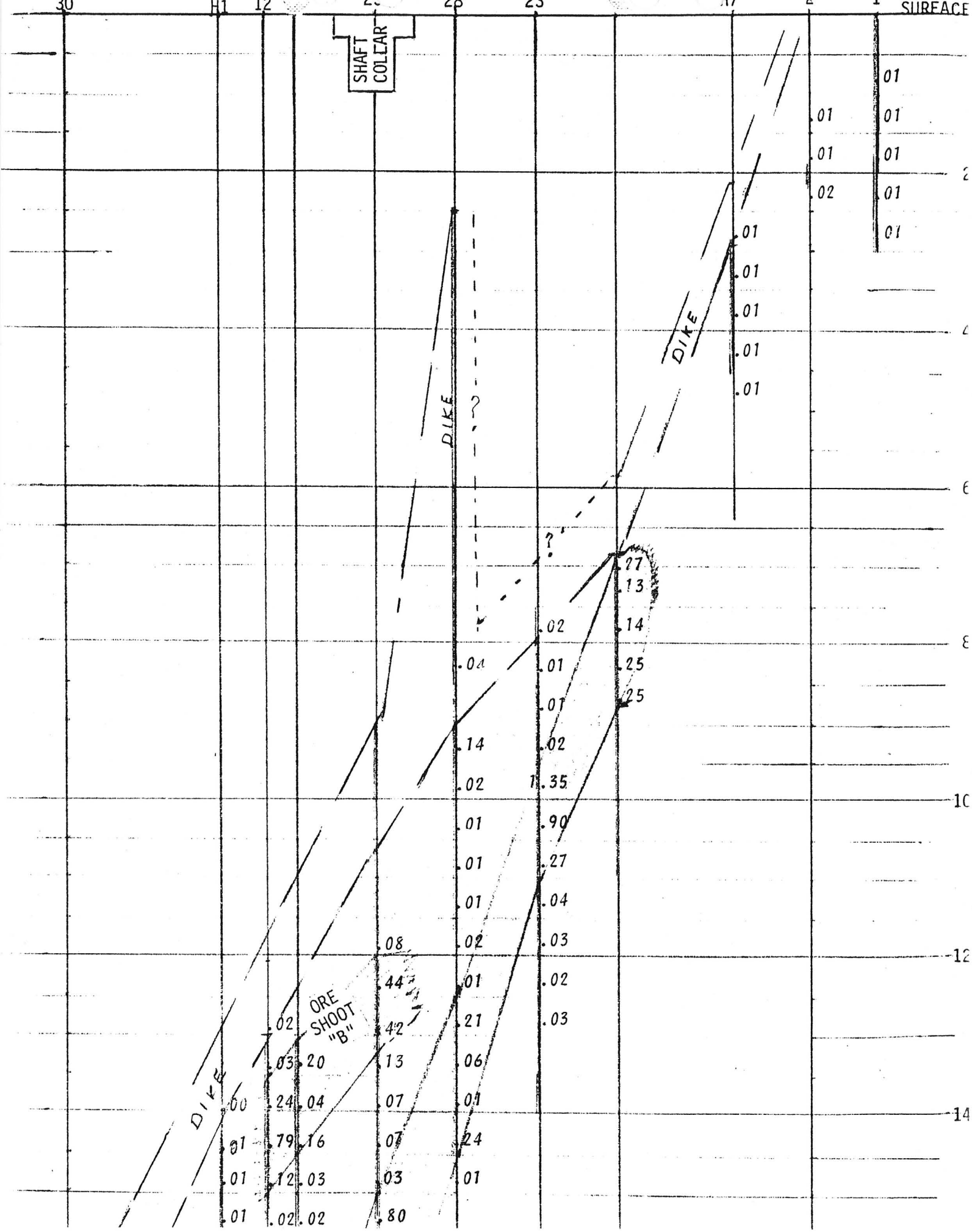


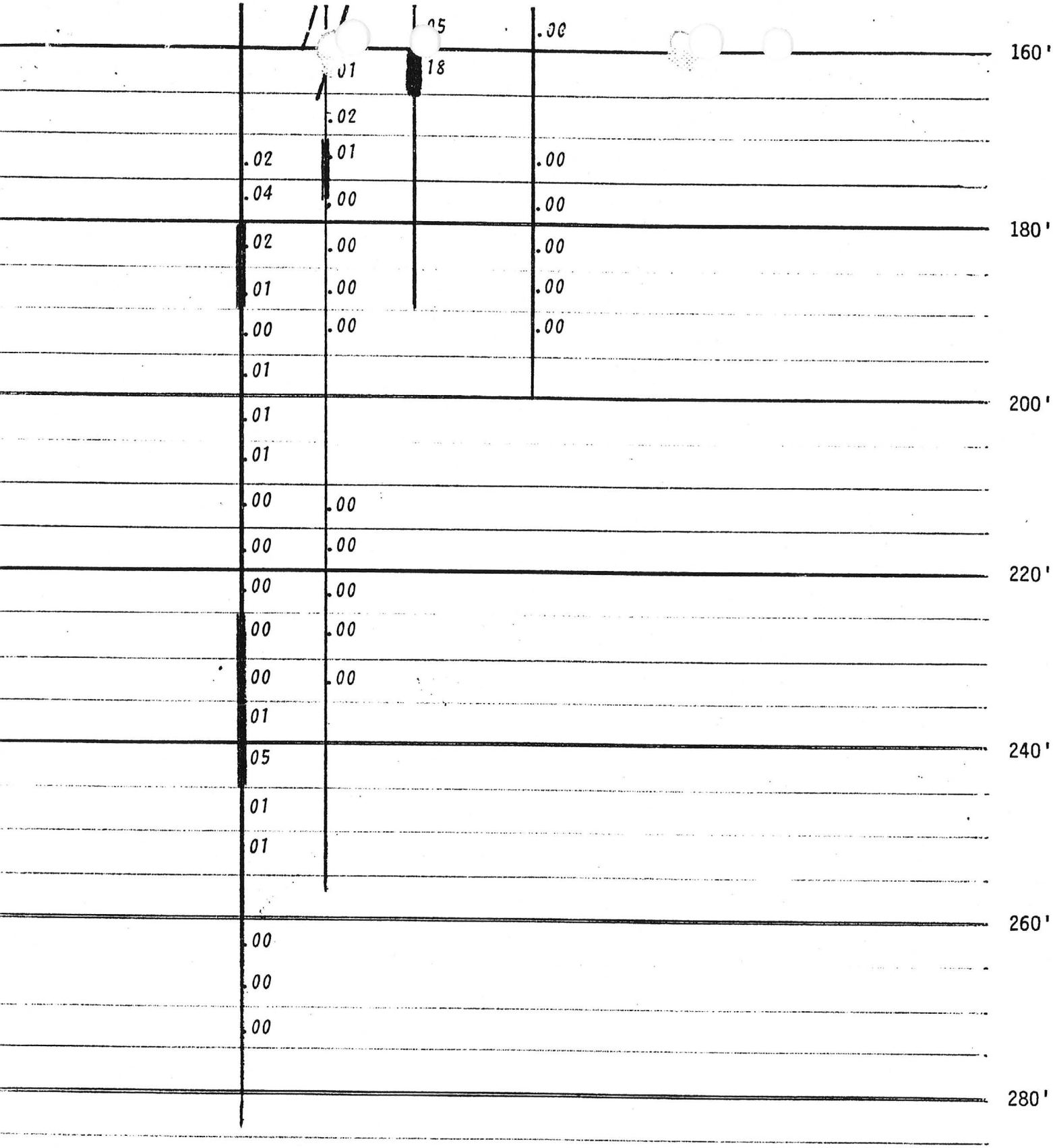
Simple Average of
50 Samples in Ore
Shoot "A" = 1.02 Oz.AU

Eliminating One High
Test (19.11 Oz.)
49 Samples Average
0.65 Oz. AU

CROSS SECTION VI

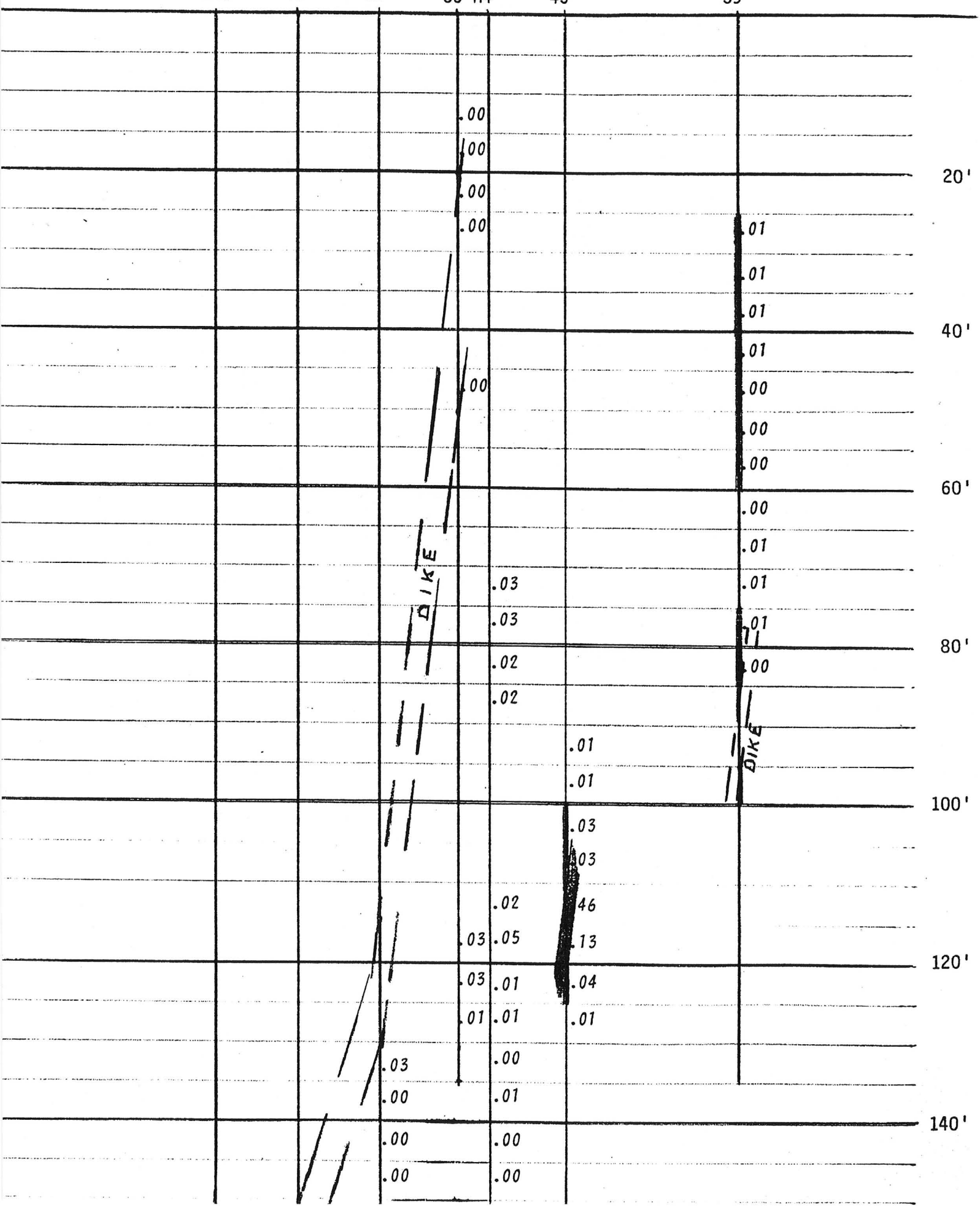
CROSS SECTION VI DRILL HOLES - AU in OZ./T 1"=15'





CROSS SECTION VII

CROSS SECTION VII DRILL HOLES & AU in OZ./T 1" = 15'



MYSTIC PROJECT
Summary of Drilling Results
Table 1
November 12, 1984

	Barren (less than .01 oz gold/ton)	Weak (.01-.04 oz gold/ton)	Moderate (.05-.09 oz gold/ton)	Moderate to Strong (greater than .10 oz gold/ton)	Total Holes	Total Footage
Mystic I						
Angle core holes	5	31	18	21	75	27,727
Percussion holes	17	6	—	—	23	4,405
INCO						
Angle core holes	—	3	1	4	8	2,352
Sub-Total	22	40	19	25	106	34,484
Mystic II						
Angle core holes	10	5	1	—	16	2,892
Percussion holes	29	6	—	2	37	7,801
Sub-Total	39	11	1	2	53	10,693
Total	61	51	20	27	159	45,177

- drilling conducted June 1980 - Aug. 1984

TABLE 2

MYSTIC, ARIZONA ANGLE CORE HOLES
Assay Results
Intercepts with Gold Greater than .10 oz/Ton

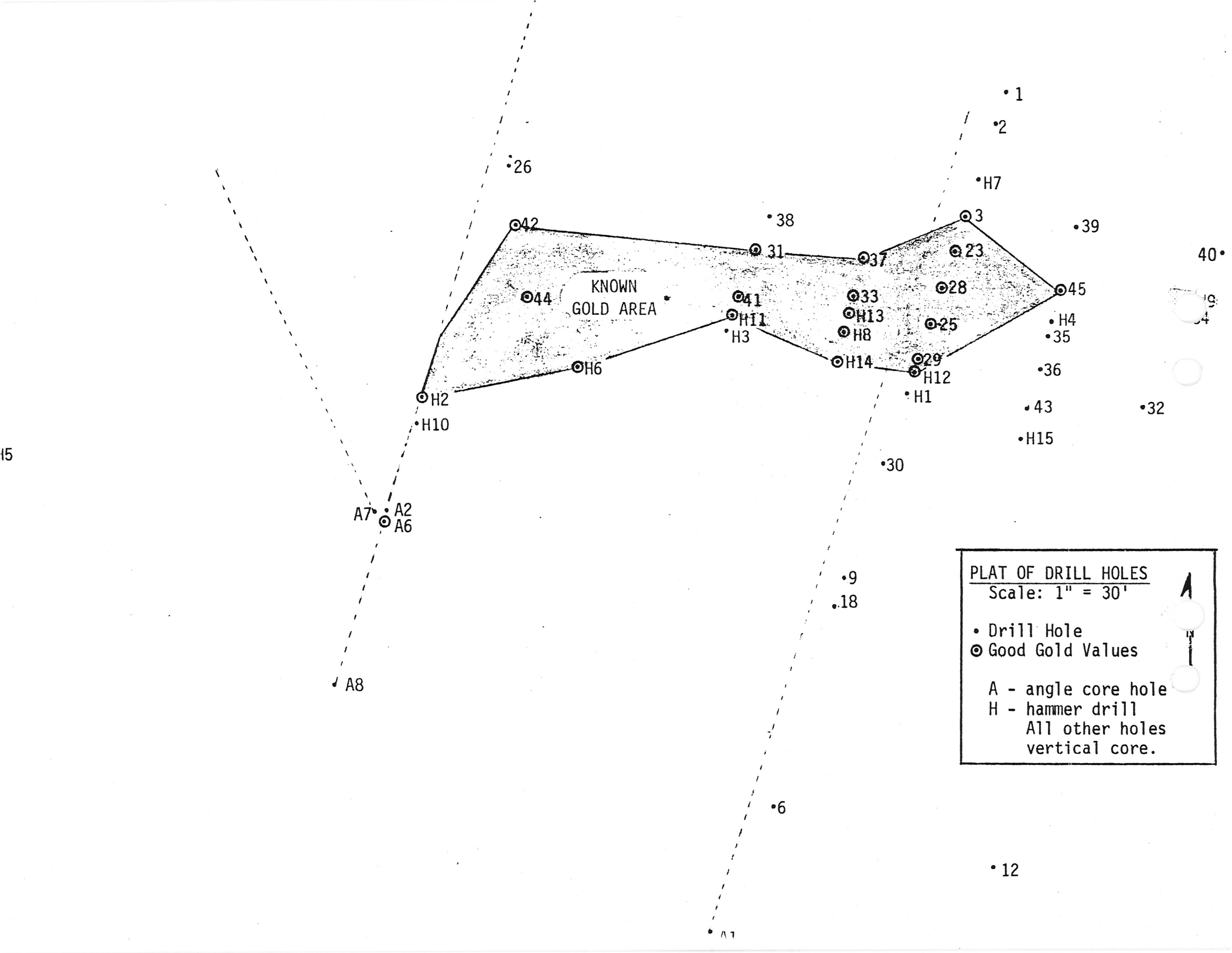
Mystic I

Ranchers' Angle Core Hole No.	Drill Depth From	To	Thickness	Gold oz/Ton	Remarks
R-1	226	243	17	.70	(incl. 4.5' - 1.96 oz/Ton)
R-2	230	235	5	3.45	
	235	245	10	.19	
R-4	148	154	6	1.45	
	194	202	8	.40	
R-6	129	132	3	.92	
R-7	250.5	253	2.5	.55	
R-8	212	218	6	.12	
R-11	240	248	8	.11	
	254	256	2	.12	
R-12	178	183	5	.30	
R-14	176	184	8	.51	
	198	204	6	.22	
R-16	71.5	73	1.5	.10	
R-17	271	276	5	1.82	
	349.5	352	2.5	.14	
R-20	185	189	4	.14	
R-22	270.5	275	4.5	.13	
R-35	247.5	260	12.5	.27	(incl. 4' - .45 oz/Ton)
R-40	121	136	15	.24	(incl. 5' - .39 oz/Ton)
R-50	242.5	247.5	5	.20	

Ranchers' Angle Core Hole No.	Drill Depth From	To	Thickness	Gold oz/ton	Remarks
R-55	368	373	5	.12	
	403	407	4	2.10	
R-56	175	180	5	.85)	(8' - .64 oz/Ton)
	180	183	3	.30)	
R-57	89.5	93.5	4	.14	
R-60	192.5	195	2.5	2.06	
	200.5	204	3.5	.10	
R-71	135	136	1	.11	

Mystic I Angle Core Hole No.	Drill Depth From	To	Thickness	Gold oz/Ton	Remarks
40992	130	136	6	.16	
	149	172	23	.43	
40994	144	168	24	.18	
	190	194	4	.10	
40996	219	222	3	.11	
40998	100	102	2	.34	

Mystic II Percussion Hole No.	Drill Depth From	To	Thickness	Gold oz/Ton	Remarks
CJ-13	25	30	5	.20	
FS-2	180	185	5	.13	


1
2
26
H7
42
38
3
39
31
37
23
40
KNOWN
GOLD AREA
44
41
33
28
45
H11
H13
25
H4
H3
H8
35
H6
H14
29
36
H12
H2
H1
43
32
H10
H15
30
A7
A2
A6
9
18
A8
6
12
PLAT OF DRILL HOLES
Scale: 1" = 30'
• Drill Hole
⊙ Good Gold Values
A - angle core hole
H - hammer drill
All other holes
vertical core.

MYSTIC MINING COMPANY

NJN WR 5/16/86: Ernie Black (c), reported that if Pak-Man Resources Industries Ltd. (c) and 2001 Resources Industries Ltd. (c) follow through on their purchase agreement with Albert Harding (c), they will become the outright owners of the Mystic (file) Maricopa County.

RRB WR 8/29/86: Mark Olm of Terra Technologies Corp. P O Box 36561, Tucson, AZ 85740 (602) 297-6358 or (702) 565-3366 reports that Terra has acquired the Mystic property, Maricopa County.

Tucson 296-5740

NJN WR 10/31/86: Mark Olm (c) of Terra Technologies (c) reported that they bought out the Mystic Mine, Maricopa County from Messrs. Al Harding and Pike. They are currently reviewing the data on the property and looking at the surrounding geology. Terra Technologies has not yet received all of the data from Hecla (ie Ranchers' data) nor the core. Those materials are expected to be received in November. After reviewing them, with Albert Harding's data, they will probably conduct a drilling program of their own. No production decision will is expected soon, although by the middle of next year they expect their plans for the property to jell.

NJN WR 5/2/87: Mark Olm (card) of Terra Technologies (card) report that they have correlated all of Al Hardin (card) and Ranchers Gold and Silver Exploration Program (file) on the Mystic (file) Maricopa County and are now looking for a joint venture partner. They are especially interested in finding someone to finance the sinking of a shaft to produce a bulk sample from underground. This would be a stage development on the Mystic and would also include some other nearby properties which are geological prospects. Immediate plans at the Mystic will be a trenching program to evaluate the near-surface potential and drilling to test the parallel structure 250' to the south identified by magnetic survey and intersected by one hole of Ranchers. That hole encountered an andesite dike and 1 foot of .1 oz/ton Au.

NJN WR 6/5/87: Mark Olm (card) of Terra Technologies (card) reported that Fischer Watt Mining (card) is going to be their joint venture partner on the Mystic (file) Maricopa County. This will be a 6 month exploration contract. Planned work will consist of magnetic and VLF geophysical surveys of the property to be followed by a trenching and drilling program.

NJN WR 8/14/87: Terra Technologies (card) have run into problems with someone else having their name first and have changed their name to Terra Mines Ltd. Mailing address had changed to P O Box 36561, Tucson, Arizona 85740, while the phone remains the same, 297-6358. They have established a Mystic (file) Maricopa County project office in Peoria, Arizona, phone 582-0212. The address of the core shack office is 8969 NW Grand Avenue, Suite B, Peoria, Arizona. shortly they hope to have the office moved into a nearby house. The phone will remain the same. Terra Mines Ltd's main office address is: P O Box 2466, Henderson, Nevada 89015, 702-565-3366.

MG WR 2/5/88: Mr. Mark Olm of Terra Mines Ltd. reported that a new drilling program was to begin immediately at the Mystic Mine (file) Maricopa County. Apparently 15 holes, totaling 6,000 feet, will be drilled using reverse ciruculation equipment.

NJN WR 2/26/88: Fred Brost (card) reported that Total Erickson Resources is drilling at the Mystic (file) Maricopa County.

NJN WR 5/20/88: Bud Hillemeyer, geologist for Fischer-Watt Gold (card) reported that close-spaced drilling has provided detailed information on the zoning of mineralization at the Mystic Mine (file) Maricopa County. The mineralization occurs between 2 bounding structures which are high-angle faults. Within this zone, horizontal joint sets appear to control the mineralization in an extremely variable fashion. Current work has identified 50,000 tons of 0.5 oz/ton Au. However, this is economically unminable because it occurs in discrete pods. Using knowledge of the horizontal joint sets they will try to identify 30,000 tons that is mineable. If successful, they will then go underground to bulk sample and develop the deposit.

MYSTIC MINING CO. MARICOPA COUNTY

KAP WR 6/7/84: Rick Renn, Geologist, Goldsil Resources Ltd reported Goldsil has contracted the sinking of an inclined shaft at the Mystic Mine (file) Maricopa County. Work is to start by June 20, 1984. He further reported they are scheduling gold production to begin by the end of 1984. A semi-portable, fully contained vat cyanide leach system is planned to treat the ores.

NJN WR 8/3/84: Rick Renn, Geologist with Goldsil Mining and Milling (c) reported that they have a few small title problems at the Mystic MIne (f) Maricopa County. When these are settled, driving of the decline will begin.

KAP WR 11/30/84: In the company of Nyal Niemuth a visit was made to the Mystic Mine (f) Maricopa County. There was evidence of recent reclaimation of previous sample trenches. New work 100-200 feet east of original shaft collar has been done to excavate an area 50' x 100' of alluvium to hardrock (8'-15' deep), possibly in preparation for collaring a proposed shaft.

KAP WR 12/7/84: Maps of the claims locations for the Mystic MIne (f) and the Bummer Group were obtained for inclusion in the Mystic Mine file. The original claims of the Mystic Mine are the Question No. 1, 2, 4, 5, 6, & 7 and the Gunbolt located by Albert Harding. An additional group of over 100 Bummer claims were located by Coe and Van Loo Engineers around the original seven for protection. The entire group was eventually transferred to Ranchers Gold and Silver, a partnership controlled by Ranchers Exploration and Development.

NJN WR 12/7/84: Rick Renn called and reported he is no longer with Goldsil Mining and Milling. They h ave cut back on their exploration staff and are getting up to put some of their properties into production. The latest news regarding the Mystic (f) is that $8-9 million will be raised in Houston before the end of the year. With these funds development should start in January.

MYSTIC MINING CO. MARICOPA COUNTY

RRB WR 12/31/82: John Robson of the J. S. Redpath Corporation reported that the American Copper and Nickel Company has a commitment to drill the Mystic property, Maricopa County. They have apparently entered into some sort of limited partnership with Ranchers Exploration and Development Corporation.

NJN WR 3/4/83: Fred M. Johnson, Geologist, P.O. Box 2162, Durango, Colorado, 81301, phone (303) 247-0118, visited. He is currently consulting for Ranchers on their Mystic exploration program. We discussed syngenetic models that might account for the iron-gold association seen in the Precambrian marine volcanic environments.

NJN WR 6/3/83: John T. Ray, Senior Geologist for American Copper and Nickel Company, Inc., 11437 W. 48th Ave., Wheat Ridge, Colorado 80033, phone (303) 425-1230., visited and reported that they have dropped their option with Ranchers Exploration and Mining on the Mystic Mine, Maricopa County. The mineralization though sometimes of high grade, was reported as too inconsistent to warrant development at today's gold prices. The deposit is still open on strike to the northeast and to the southwest.

NJN WR 8/12/83: George Allen with the U.S.G.S. Precious Metal Exploration Group reports the USGS is interested in doing work on tertiary remobilized gold deposits. Of interest to them was the geology of the Mystic Mine area in Maricopa County.

RRB WR 9/2/83: Armand H. Beers, Chief Geologist, Morrison Knudsen Company, Boise, Idaho, called for information on the location and geology of the Mystic Mine, Maricopa County. I sent him excerpts from our file.

KAP WR 2/10/84: Mr. Albert C. Harding's original claims on his Mystic discovery, Mystic Mine, Maricopa County are the Question #1, #2, #4-#7 and the Gunbolt. These claims are located in the W½ Sec. 12 and the E½ Sec 11, T5N R1W.

NJN WR 3/2/84: Rick Renn (c) visited and reported that Goldsil Mining and Milling has picked up the Mystic Mine, Maricopa County, from Ranchers Exploration Inc. They plan to evaluate the available information and then put the property into production. Mr. Renn will be the project geologist.

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MYSTIC MINING CO. MARICOPA COUNTY

KAP WR 10/23/81: Mystic Mine: Pikes Peak District, Maricopa County. No sign of recent activity. Sights of last year's drilling activity by Ranchers Gold and Silver Exploration Program, 1980 was evident on the property. Ranchers Gold and Silver is partially owned and fully managed by Ranchers Exploration and Development.

Bummer Claims: Pikes Peak District, Maricopa County. The Bummer Claims (Bummer #1 through Bummer #107, less some intermediate numbers) are located in portions of sections 3, 10, 12, and 14 T5N R1W and sections 1 and 6 T5N R1E. The claims adjoin and surround the Mystic Mine property. They were staked by an independent engineer primarily to protect and extend the property position of the Mystic Mine. The claims were acquired by Ranchers gold and silver which has a lease on the Mystic. Ranchers Gold and Silver Exploration Program, 1980 is partially owned and fully managed by Ranchers Exploration and Development.

Win Claims: Pikes Peak District, Maricopa County. The Win Claims (Win #1 through Win #737) are located in portions of T5N R1W and T6N R1W. They generally adjoin the Bummer Claims and are north of them. The claims were located by Rocky Mountain Surveyors Inc. The claims were located for Ranchers Exploration and Development to acquire additional holdings in the area of the Mystic Mine. Recent drilling has been done on Win #125 just north of the Bummer Claims. in Section 35, S½ T6N R1W. The drilling has been done on a quartz dike (vein) structure which is slightly discordant with the schist.

KAP WR 4/16/82: In the company of Dick Beard a visit was made to the Mystic Mine, Maricopa County. There was no indication of any activity since the last visit at the original discovery area. The entire project claim group, consisting of hundreds of claims was not visited.

NJN WR 8/27/82: Lenn Pritchard, Seven Cities Mining, reported Ranchers is drilling again at the Mystic Mine.

NJN WR 9/3/82: The cutting of a drill pad was observed on Rancher's Exploration and Mining Company's WIN claims just south of Highway 74 and west of Lake Pleasant. The work was being done on September 2nd. and was probably part of their assessment work. The pad was being centered on a banded iron formation (BIF) outcropping in the metavolcanics.

NJN WR 11/5/82: George Van Etten with Ranchers Exploration and Development reported that they have drilled a total of 71 holes at the Mystic Mine, Maricopa County. The next phase of Rancher's program there will likely involve the sinking of a pilot shaft.

Do Not Copy

I called Mr. Al Harding (Sun City) and made arrangements to meet him Dec. 19th to visit his property north of Sun City in the Hieroglyphic Mtns. He is drilling on an inclined mineralized fissure in the oxidized zone and is concerned whether better values of lead and zinc would occur at greater depth in the sulfide zone. As an extension of this investigation I shall visit the Rich Hill gold area (Weaver Dist) and the Vulture mine area. REL WR 12-17-73

Met with Mr. Al Harding and his partner Mr. Leith Pike and went to his property approximately 9 miles north of Sun City in the Hieroglyphic Mtns. I examined cuttings obtained from hammver drilling with a petrographic microscope; examined core from diamond drill which is presently drilling to intercept the sulfide zone at depth (+900') and walked all over general area to study geology and mineralization features at the surfaces. Except for one tunnel that I examined all other workings (mainly shafts) were inaccessible. Harding said that the dollar average for combined metals of Zn, Pb, Au, Ag, and Cu assayed for 28 holes is $7.70. The fissure strikes N60°W and dips 60° - 80° southwest. The mineralized zone is about 10 feet wide. The water table is at 300 feet in depth but oxide minerals have been found as deep as 600 feet. Current diamond drilling is being done to test for increased mineral values at depth in the sulfide zone (+900'). The major minerals are Zn (1.8%) and Pb (1.5%) in a manganese matrix. REL WR 12-19-73

KAP WR 10/11/79: In the company of Mason Coggin traveled to Mr. Albert Harding's Mystic Mine, Pike's Peak (Morgan City) District, Maricopa County. The property is well described in considerable detail in recent reports he has placed on file. A separate report has been written.

KAP WR 6/20/80: Mike Attaway, mining engineer, Rancher's Blue Bird Mine, reported that Ranchers has leased Mr. Harding's Mystic Mine, Maricopa County. They plan exploration and hope to increase the reserve of gold ore.

KAP WR 1/9/81: Mike Attaway of Ranchers Exploration and Development, reported that their Gold Exploration Group is continuing to drill at the Mystic Mine, Pike's Peak District, Maricopa County. They have four drill rigs in operation, have delineated the deposit along at least 2000 feet of strike length. Thus far, they have proved Albert Harding's reserve and lengthened the reserve along the strike.

KAP WR 11/6/81: Fred Schilling of Ranchers Exploration and Development reported that a second new drill hole (1981-1982 season) has been completed on the Mystic Mine project, Maricopa County.

NJN WR 10/30/81: From a usually reliable source it was reported that contrary to rumor, Ranchers Exploration and Development is not seeking to sell thier Mystic Property.

MULTIC (F) MARI. HWC

SAGUARO NATIONAL PARK
LAND EXCHANGE
FINAL
ENVIRONMENTAL ASSESSMENT

U. S. Department of the Interior
Bureau of Land Management
Phoenix Field Office
Arizona

Maricopa County
and
Pima County
Arizona

Environmental Assessment
AZ 020-97-059

October 1997

(IN PART)

Finding of no significant impact (FONSI)

Name and number of environmental assessment: Saguaro National Park Exchange Environmental Assessment AZ-020-97-059.

Bureau of Land Management office: Phoenix Field Office

Finding of no significant impact: I have reviewed the environmental assessment and have determined that there are no significant impacts on the human environment. An environmental impact statement (EIS) is not required.

Rationale:

1) The selected lands were identified for disposal through the Phoenix Resource Management Plan (RMP) approved in 1988. An environmental impact statement was prepared analyzing impacts associated with the approved RMP.

2) There are no significant impacts associated with the following critical elements to the human environment: threatened and endangered species; surface and groundwater quality and quantity; floodplains; environmental justice and Native American religious concerns. The other critical elements were either not present or not impacted by the action.

3) Impacts to cultural resources on the selected lands would be mitigated through data recovery prior to the conveyance or as required through a deed restriction.

4) Impacts to the human environment associated with hazardous materials on the selected lands would be mitigated through remediation action prior to the conveyance or required through a deed restriction.

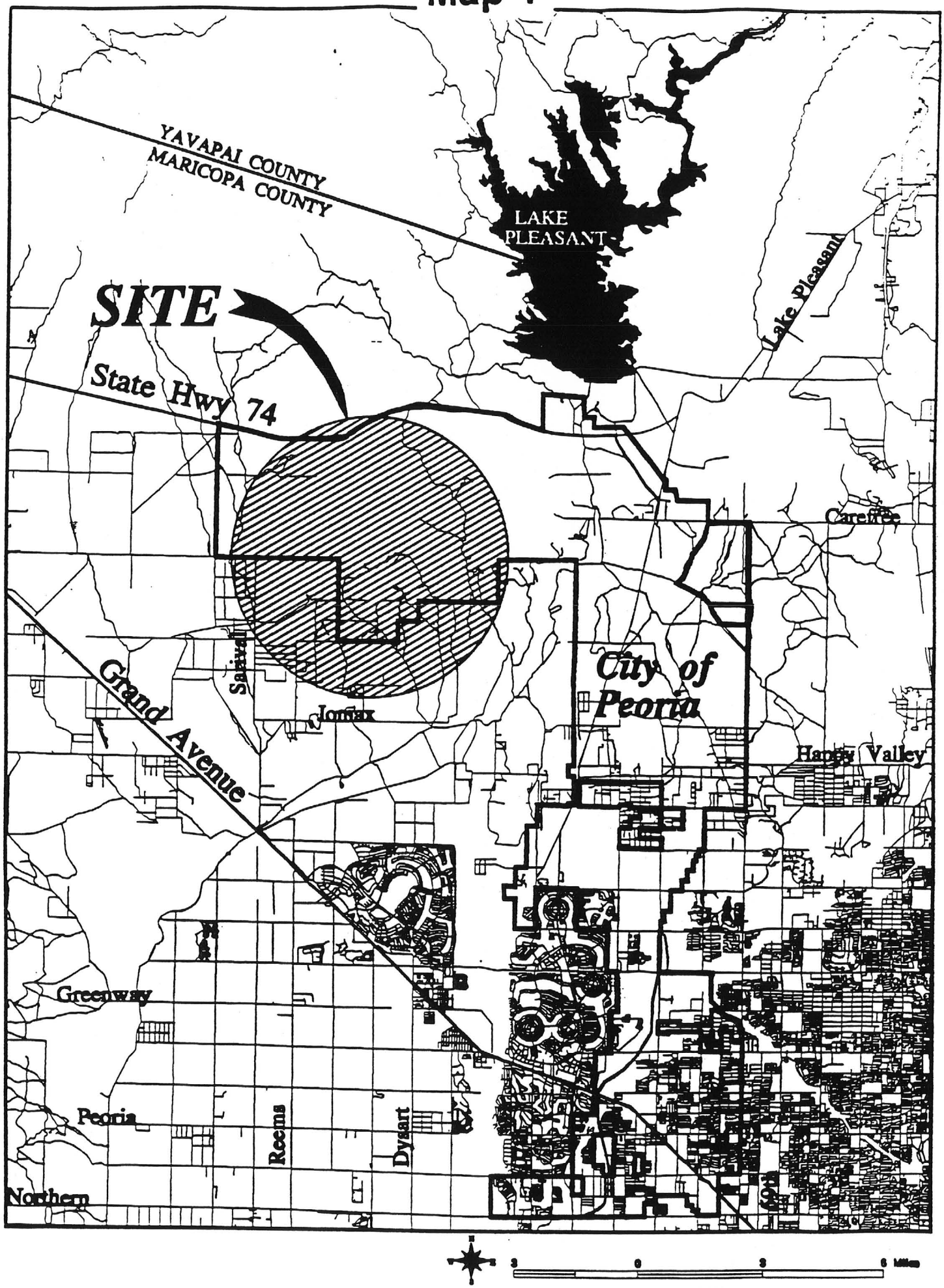
5) As required by Section 206 of the Federal Land Policy and Management Act of 1976, Public Law 94-579, analysis has shown that criteria for completing the exchange would be met through the proposed exchange.

Responsible officials:

Recommendation of finding: _____ 6/6/97
Group Administrator **Date**

Approval of finding: _____ 6/6/97
Field Manager **Date**

Map 1


YAVAPAI COUNTY
MARICOPA COUNTY
LAKE PLEASANT
SITE
State Hwy 74
Lake Pleasant
Carefree
City of Peoria
Grand Avenue
Sarival
Jomax
Happy Valley
Greenway
Peoria
Reems
Dysart
Northern
3 0 3 6 Miles

All federal land exchanges are based on a dollar-for-dollar exchange; that is, the dollar values of the selected and offered lands must be within 25 percent of each other.

7. **Comment/issue:** Why aren't the selected lands closer in value to the offered lands as they are near a water source (the Central Arizona Project canal) and future planned development?

Response: The appraisals for selected and offered lands were conducted using laws and regulations described in the response to comment/issue 6 above. The appraisals consider the current and potential uses of the lands; the comparable market-based rates of similar land and, in cases in which the mineral estate is being disposed of (selected lands), the mineral potential of the lands.

8. **Comment/issue:** Why doesn't the U.S. Government purchase the offered lands?

Response: The Secretary of the Interior has strongly encouraged acquisition of lands for preservation through exchange rather than expenditure of very limited federal funds. While this method is not always feasible, the proposed exchange is the appropriate method of acquisition for the offered lands. The private land proponent is interested in an exchange, rather than a direct purchase. The selected lands have been identified for disposal through the Phoenix RMP and would eventually be removed from federal ownership through a land exchange or other means.

2.0 THE PROPOSED ACTION AND ALTERNATIVES CONSIDERED

This section describes both the proposed action and no action alternatives analyzed in this EA. In addition, it identifies and describes foreseeable uses and discusses alternatives that were considered but not studied in detail, stating the reasons for their elimination.

2.1 Alternatives, including no action

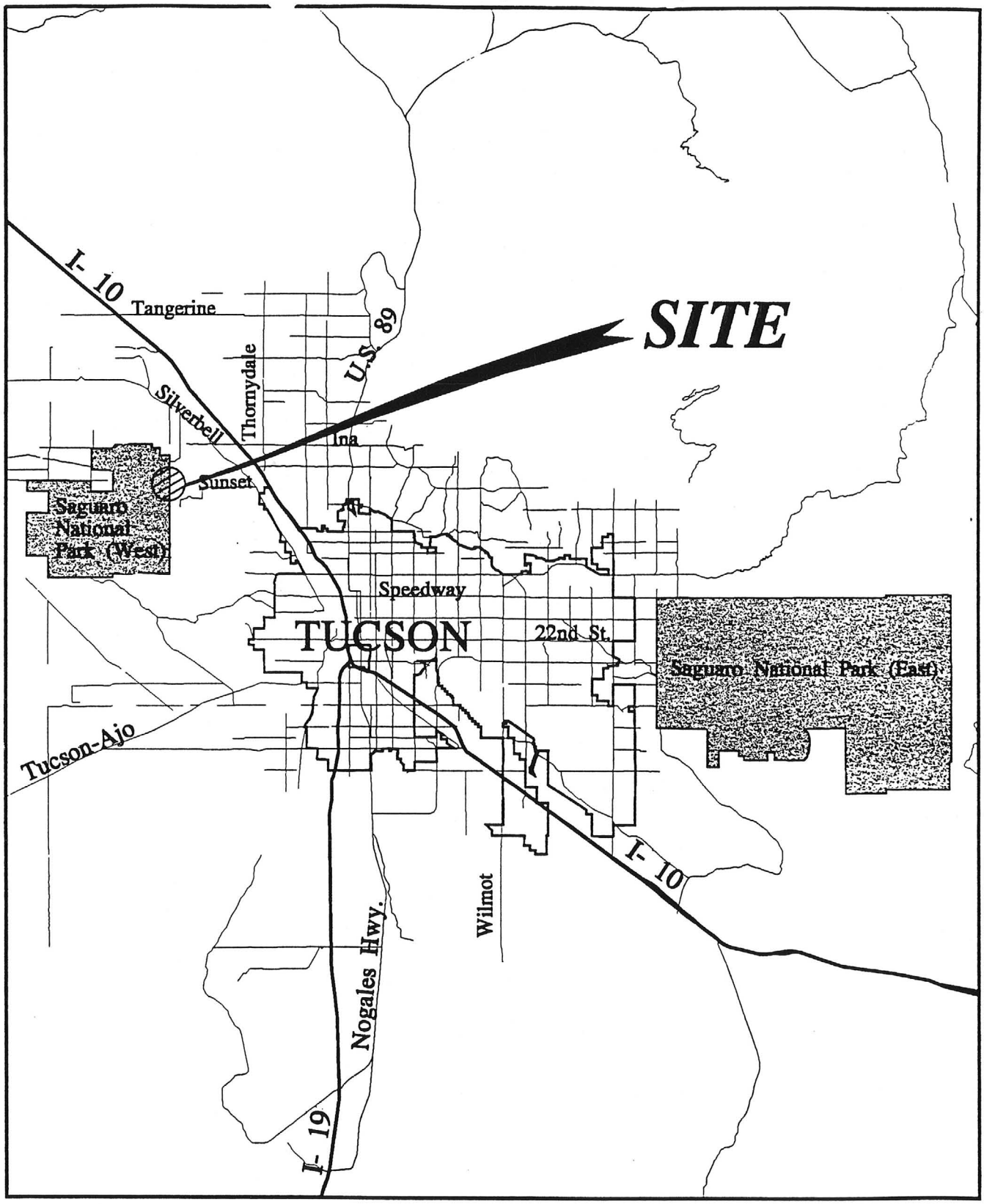
2.1.1 Proposed action

The proposed action is a land exchange between the BLM (for the NPS) and Tucson Mountain Associates, LLC. Tucson Mountain Associates, LLC would acquire approximately 4,322 surface and subsurface acres (selected lands) south of State Highway 74 (see maps 1 and 2). In exchange for the selected lands, the NPS would acquire between 532 and 711 surface acres (offered lands) within the congressionally designated Saguaro National Park (see maps 3 and 4), owned by Tucson Mountain Associates, LLC. The subsurface of the offered lands is owned by the federal government. Legal descriptions of the selected and offered lands are in Appendix A. The final offered land acres will be determined when the final value of the mineral estate of the selected lands is determined. The surface value of the selected lands would allow for acquisition of 532 acres of offered lands.

2.1.2 No action

Under this alternative, no lands would be exchanged. The selected lands would remain in public ownership, but would remain suitable for disposal as set forth in the Phoenix RMP. Future exchange proposals, sales or recreation and public purposes (R&PP) leases could be made selecting the subject lands. Until disposal, the selected lands would be managed as multiple-use lands. Tucson Mountain Associates, LLC would retain ownership of the offered lands (surface) and could use and manage the properties in accordance with the rights, privileges and obligations of private ownership; these lands could be developed for residential or other purposes.

Map 3



LEGEND

- Tucson City Limits
- Saguaro National Park
- Collector Streets
- Major Highways
- Interstate Freeways

N
W E
S

6 0 6 12 Miles

Table 3-1: Surface water rights and groundwater permits of the selected lands				
Filing number	Holder	Water source	Location	Water use[1]
36-20844[2]	BLM	Big Spring	T. 5 N., R. 1 W., sec. 1, lot 3 (NW1/4NE1/4NW1/4)	S, W, R
36-20865[2]	BLM	Big Spring	T. 5 N., R. 1 W., sec. 1, lot 3 (NW1/4NE1/4NW1/4)	S, W, R
55-501814	BLM	Big Spring Well	T. 5 N., R. 1 W., sec. 1, lot 3 (NW1/4NE1/4NW1/4)	S, W
55-501815	BLM	Prince Well	T. 5 N., R. 1 W., sec. 9, SW1/4SW1/4SE1/4	S, W
55-085598	Hicks	Unnamed well	T. 5 N., R. 1 W., sec. 14, NW1/4NE1/4SW1/4	M

1 Water use: S = stockwater; D = domestic; W = wildlife; M = mining
2 These filings are the BLM's federal reserved rights for Public Water Reserve 107 and cannot be transferred. These claims will be withdrawn with ADWR.

Adjudication, a legal proceeding whereby the Arizona Department of Water Resources (ADWR) determines the validity and relative priorities of all water rights claimed. Surface water rights and well permits on the selected lands are described in Table 3-1. Surface rights include two BLM federal reserved right "36" claims for stockwater, wildlife and recreation on Big Spring. These claims are for Public Water Reserve 107 and cannot transfer out of federal ownership. ADWR records show three registered wells; however, only the two well permits held by the BLM would be assigned as part of the land exchange.

3.1.2.4 Floodplains

The FIRM flood insurance plot maps for Maricopa County identify, in secs. 14 and 15 of the selected lands, several drainages as special flood hazard areas inundated by 100-year floods. Lands in the 100-year floodplain are restricted to facilities of low value.

3.1.2.5 Waste, hazardous or solid

The selected lands were utilized for a number of mineral exploration efforts, as well as the Mystic and the Clementine mines, both of which were abandoned in the 1980s. A phase I hazardous materials survey of the selected lands was conducted on April 6, 7 and 8, 1997, revealing, in addition to these two mining operations, the existence of an underground storage tank and a well in T. 5 N., R. 1 W., sec. 14, NW1/4NE1/4SW1/4.

3.1.3 Land uses

3.1.3.1 Geology, mineral potential and rights

The selected lands are among bedrock exposures of the Hieroglyphic Mountains, a range within the Sonoran Desert portion of the Basin and Range Physiographic Province. The province is characterized by north-to-northwest-trending mountain ranges and intervening down-dropped, sediment-filled basins. Surface exposures are predominantly older rock (Precambrian) consisting of metamorphosed rhyolite and andesite, granitoid rocks and schists intruded by younger (Tertiary) basalt, rhyolite and andesite. Northwest-trending faults occur north of Twin Buttes. The Mystic Mine, east of the subject lands, is on this fault system. Recent exploratory drilling on the selected lands determined the potential for gold mineralization within such known fault zones. Elevations vary from 1,460 to 2,345 feet on the selected lands. Prominent natural features include Twin Buttes and White Peak in the southeast portion of the selected lands. Man-made mining facilities

include the inactive Mystic Millsite, Clementine Millsite, White Peak Mine and White Peak Quarry.

Low to high mineral potential exists depending on site-specific location within the selected lands. High mineral potential exists in the SE1/4NE1/4 of sec. 11 just west of the Mystic Mine and the S1/2SW1/4 of sec. 10 near the Old White Peak Mine. A total of 69 mining claims exist and may be explored and/or developed under the 43 CFR 3809 regulations. The land is not potentially valuable for leasable and saleable minerals.

3.1.3.2 Land ownership

The selected lands are five miles southwest of Lake Pleasant within the Peoria city limits in Maricopa County. Within this area, land ownership is fragmented south of Highway 74 with private and state lands surrounding the selected lands. Significant blocks of BLM land are north of Highway 74 in the Lake Pleasant RCA.

3.1.3.3 Access

There is physical access to the selected lands but no legal access. The Central Arizona Project canal has its physical access. To access these lands, the public uses existing single-lane dirt roads which require four-wheel-drive vehicles in places. Highway 74 runs east-west two to three miles north of the selected lands.

3.1.3.4 Public lands management

The selected lands are managed under the BLM's multiple-use mandate (FLPMA) and in accordance with the Phoenix RMP, other applicable laws and regulations. No portion of the selected lands has been set aside as a designated area. Present uses include grazing, mineral development and recreation. The Central Arizona Project has a prior existing right that crosses the southern portions of secs. 14 and 15. The land under the Central Arizona Project right of way/withdrawal application will be retained in federal ownership.

3.1.3.5 Grazing

The Bo Nine grazing allotment encompasses all 4,322 acres of the selected lands. This represents about 17.5 percent of the allotment's total acreage and supports 216 animal unit months (AUMs). The allotment has two range improvements registered with the BLM on the selected lands -- the Big Spring Well in sec. 1 and Prince Well in sec. 9 -- and both are inoperable (see Map 5).

3.1.3.6 Recreation

Recreational uses include hunting with related hunting camps, hiking and off-highway-vehicle (OHV) use of existing roads and trails. OHV use is limited to existing roads and trails. Use is dispersed and no visitor figures have been recorded.

3.1.4 Cultural resources

3.1.4.1 Prehistoric and historic sites

Intensive field surveys have been completed on 2,250 acres of the selected lands. Unsurveyed areas consist primarily of steep mountain slopes unlikely to contain archaeological sites. The BLM developed survey sampling designs in consultation with the State Historic Preservation Office.

The surveys located 13 archaeological sites. One prehistoric site was fully investigated in conjunction with construction of the Central Arizona Project aqueduct. Nine of the 12 existing sites date to the prehistoric period prior to A.D. 1450, two sites date to the early twentieth century and one site has both prehistoric and historic features.

The prehistoric sites include artifact scatters of varying densities -- two sites contain bedrock mortars (grinding areas) and two others have the remains of possible structures in addition to numerous artifact types. Except for one earlier Archaic period site, the prehistoric sites appear to have been used by people of the Hohokam tradition, who occupied the area between A.D. 500 and 1450. Several large Hohokam villages were along the Agua Fria River a few miles to the east.

The prehistoric sites are concentrated in two areas where natural tanks in washes likely provided a water source. The sites may represent seasonal habitation associated with wild plant collection and processing activities. The two sites containing structures, and possibly others, may be eligible for nomination to the National Register of Historic Places for their potential to yield significant information about prehistoric land use and subsistence in the uplands near the Agua Fria River. The BLM will make eligibility determinations in consultation with the State Historic Preservation Office.

The historic sites on the selected lands consist of small trash dumps deposited between 1900 and 1950, probably in association with prospecting or other mining activities. As evidenced by isolated mining features and the remains of modern mining operations, mining has been the predominant historic land use. The historic sites have been fully recorded

ADMMR Field Visit

Mine **Mystic** (f) Maricopa — T5N, R1W, Sec. 12 — Date: **February 26, 1993**
Mill **Redtail** (f) Yavapai — T9N, R5W, Sec. 30 nw — Engineer: **Nyal J. Niemuth**

Operating Company: **Mystic Mine LLC, INC.**, an Oklahoma company registered in Arizona
Local Address: **P.O. Box 71773, Phoenix, AZ 85080** Phone: **602-9938767**
Information from: Joe Stocks and Graham Patterson for Mystic. Bob Barefoot for Redtail mill.

This group has taken over mining and milling following about one year of operation by Fischer Watt Mining. During that time it is reported that Fischer Watt produced approximately 18,000 tons of ore that had a recovered average of 0.32 oz/ton Au (5760 oz Au). This grade is likely lower than the actual grade of material mined reflecting gold mineralization that occurs both as coarse free milling and as fine micron size particles amenable to cyanide mill recovery. Early ore was treated in a small gravity mill on site while later ore was treated at the cyanide mill at Repulbic Goldfield's Congress mine. Some of the gravity tailings were also retreated at the Congress mill.

Mystic mine LLC Inc. has **three** operating groups or partners. These consist of: **Frank Downey and Joe Stocks** (Stock's address and phone above) who put the deal together and handles administration; **RMG Mining Inc.**, Graham Patterson, Vice President, 2814 W. Bell Rd #1465-307, Phoenix, AZ 85023, Phone 602-863-1740, Fax 602-548-9540, Mobile phone 602-541-4321 handles the mining ; and **DCRS (Canada) Ltd.** (contact is Bob Barefoot) P.O. Box 20818, Wickenburg, AZ 85358, Phone 602-684-3032 or 602-684-2867 does the milling at the Redtail facility. For details of the DCRS process see ADMMR's Redtail mill file.

Mystic Mine LLC Ltd. subleased the mine about 18 weeks ago. Fischer Watt shut down before mining out the last 50' vertical of reserves identified by drilling. This was partly due to an attempt, carried out by their contractor, Small Mines Development, to greatly increase tonnage and decrease mining costs by conducting a large vertical blast. Reports on the results are mixed, but it likely resulted in a lot of dilution and problems with support. Mineralization is hosted in a high angle shear zone associated with an intrusive tertiary felsic volcanic dike intruded into metasedimentary schist of the Yavapai series. The dominant gangue mineral is fine grained, massive, earthy, red, hematite. This combination results in bad ground requiring lots of support in the form of bolts, split sets, panels, cyclone fencing, etc. Below the present level, approximately the 300, are only a couple of drill holes, but they intend continue mining to test for ore extensions. Present widths and grades are reported as improving and among the best seen.

The mine is accessed by a spiral ramp decline developed in the foot wall of the shear zone. Grade of the ramp is -16° and it has a total length of 3250'. A misting system similar to that used for summer patios for temperature control is used in the ramp to control dust. As the mineralized shear is approached, much white, coarse calcite is commonly observed in the footwall. Shear widths greater than 50' are reported but observing or estimated the mineralized width is difficult as red earthy specular hematite is pervasive throughout the shear and not confined to the mineralized area. Sampling is conducted by panning, with areas containing 0.2 oz/ton Au or above readily showing a large gold tail in a pan.

It was reported that the current mining operation has produced 2,000 tons of near 1 ounce material which has all been trucked to the Redtail facility. Ore production is targeted at 100 tons per day. Staff consist of 4 office people and 12 miners. Mining equipment on the Mystic site includes a 3 yard loader, 2 - 8 ton underground haul trucks, an underground loader, diesel powered generator and compressor, a storage truck (used as shop and to house parts inventory) and a small trailer used as mine office.

It is interesting to note that the prospect shaft the old timers sunk can observed underground. It was reported that it fell about 3 feet short of intersecting high grade gold mineralization!

Date Printed: 11/10/92

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES

VERBAL INFORMATION SUMMARY

Information from: **DOUG LINDSAY**

Company: LINDCO EQUIPMENT
Address: 1219 SOUTH 19 AVENUE
City, State ZIP: PHOENIX AZ
Phone: 254-6494

MINE: **MYSTIC**

ADMMR Mine File MYSTIC
County: **MARICOPA**
AzMILS Number:

SUMMARY

A NEW GROUP IS PREPARING TO TAKE OVER THE MYSTIC MINE FOLOWING THE 12-91 THROUGH 8-92 PERIOD OF OPERATION BY FISCHER WATT. IT IS ESTIMATED ABOUT 10,000 TONS WERE MINED AND MILLED DURING THIS PERIOD. THE NEW GROUP INVOLVES JOE STOCKS FORMER MINE SUPERINTENDENT AND BOB PATTERSON OF UTAH AND IS CALLED RMG MINING CO. ORE WILL BE SHIPPED TO THE RED TAIL MILL NEAR CONGRESS.

NYAL J. NIEMUTH, MINING ENGINEER Date:11-5-92

ABSTRACTED FROM ADMMR ACTIVE MINES DIRECTORY, 1992

Mystic Gold file
Maricopa County

FISCHER WATT GOLD CO. INC.

Mystic T10N, R1W, Sec. 12
114 West Tucker, Kingman, AZ 86401 - Phone 753-1622 Employees: 12 - Located 20 miles northwest of Phoenix - Underground gold mine - 200 TPD gravity mill.
Mine Superintendent Joe Stocks
Mill Superintendent H. Mason Coggin

VIS6.9

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES

VERBAL INFORMATION SUMMARY

1. Information from: Jim Weatherby at Congress Mine

   Company:

   Address:

2. Phone:

3. Mine: Mystic

4. ADMMR Mine File: Mystic

5. County: Maricopa MILS Number:

6. Summary of information received, comments, etc.:

   Efforts are continuing to develop a custom treatment/purchase contract for the Mystic ore by the Congress mine mill. Coarse free gold in the Mystic ore makes developing a simple schedule difficult.

Date: 7/11/91 Engineer: Ken A. Phillips

MAKE CARD ON COMPANY MYSTIC (F[illegible]) MARICOPA ✓ 4

OFFICE OF THE ARIZONA STATE MINE INSPECTOR
1700 W. WASHINGTON, SUITE 400
PHOENIX, AZ 85007
(602) 542-5971

PIN # _____ INSPECTION DATE: 5/21/91

HEALTH AND SAFETY INSPECTION REPORT

This report is made pursuant to Arizona Revised Statutes Section 27-124

STATE ID #: 865 DEPUTY NAME: FRANK SEPULVEDA MSHA ID#: _____

COMPANY: MINING DRILLING & MILLING, INC.
MAIL ADDR: P. O. BOX 43257
CITY: PHOENIX STATE: AZ ZIP: 85080 OPERATION: _____
COUNTY: MARICOPA PHONE#: 581-6340
MINE/PLANT NAME: MYSTIC MINE
LOCATION: RANGE: 1-~~E~~ W TOWNSHIP: 5-N SECTION: 12
DRIVING DIRECTIONS:
5 miles north of Jomax and 107th Avenue. 4 miles north of the CAP Water Pipe System.

STATUS: PERMANENT? ✓ INTERMITTENT? ___ PORTABLE? ___ CONTRACTOR? ___

PRIMARY OFFICIAL: Mark Minchey, President
DESIGNATED SAFETY OFFICAL: _____
OTHER OFFICIALS: Marion Birch, Supt.

NUMBER OF EMPLOYEES (including on site office staff): 4

PRINCIPAL PRODUCT: GOLD & SILVER

	NEW	TOTAL		NEW	TOTAL
VIOLATIONS:	4	4	HAZARDS ELIMINATED:	0	0
RECOMMENDATIONS:	0	0	WITHDRAWALS:	2	2
EXTENSIONS:	0	0	ABATEMENTS:	0	0
DIESEL:	0	0	TESTS:	0	0
ELEVATOR:	0	0	RESP. DUST:	0	0
			OUTSTANDING VIOLATIONS:		2

INSPECTION PARTY: FRANK SEPULVEDA, DEP. MINE INSP. Marion Birch, Supt.
ELEV. CREDIT? N
COMMENTS:

VIOLATIONS & RECOMMENDATIONS ON PAGE 2

VIS6.9

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES

VERBAL INFORMATION SUMMARY

1. Information from: Jim Weatherby at Congress Mine

   Company:

   Address:

2. Phone:

3. Mine: Mystic

4. ADMMR Mine File: Mystic

5. County: Maricopa MILS Number:

6. Summary of information received, comments, etc.:

   Efforts are continuing to develop a custom treatment/purchase contract for the Mystic ore by the Congress mine mill. Coarse free gold in the Mystic ore makes developing a simple schedule difficult.

Date: 7/11/91 Engineer: Ken A. Phillips

FVR15.2

Arizona Department of Mines and Mineral Resources

VERBAL INFORMATION SUMMARY

Field Visit Report

1. Information from: **Brief field visit by Nyal Niemuth and Ken Phillips**
   Address:
2. Mine:
3. ADMMR Mine File **Mystic**
4. County: **Maricopa**
5. District
6. Township Range Sec(s)
7. Location:
8. No. of Claims - Patended Unpatented
9. Owner (if different from above)
10. Address:
11. Operating Company:
12. Pertinent People and/or Firm:
13. Commodities:
14. Operational Status:
15. Summary of information received, comments, etc.:

Drove through property after visit to Clementine. Evidence of drilling within last two years noted. Trenches and portal site as previously noted. Shaft never started. Fischer - Watt waiting for joint venture partner to go underground to confirm continuity of mineralization.

Date: March 3, 1989 Ken A. Phillips
Signature ADMMR

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES

VERBAL INFORMATION SUMMARY

1. Information from: Bud Hillemeyer

   Company: Fischer-Watt Gold Co. Inc. (c)

   Address: 114 Tucker #7

   Kingman, AZ 86401

2. Phone: 753-1622

3. Mine: MYSTIC

4. ADMMR Mine File: Same

5. County: Maricopa

6. Summary of information received, comments, etc.:

Mr. Hillemeyer reports that the land containing the Mystic will be exchanged by the BLM and become deeded land. The developer involved offered #3 million to extinguish the unpatented mineral rights. It was accepted with the following breakdown. Terra Mining Ltd. (c) $2 million, Total Erickson (c) $650,000, and the rest to Fischer-Watt. Upon close of escrow Fischer-Watt hopes to obtain a 8 year, 100% interest on the property from the developer. If successful in obtaining a lease, they would sink a decline to obtain bulk samples to confirm mineralized grade before proceeding with any mining plan.

Date: September 13, 1988

Nyal J. Niemuth, Mining Engineer

MYTIC (+)

FOR IMMEDIATE RELEASE

CONTACT: Perry Durning, President
Fischer-Watt Gold Co., Inc.
602-753-1622

Mike Williamson
Stockbridge Public Relations
214-692-1833

FISCHER-WATT REPORTS ACQUISITION OF TWO GOLD PROPERTIES; INCREASED GOLD RESERVES AND OTHER DEVELOPMENTS

Reno, Nevada, July 28, 1987 -- Fischer-Watt Gold Company, Inc. (OTC - Pinksheets) today announced that it has entered into separate joint ventures to explore and develop the Mystic Mine in Maricopa County, Arizona, and the Secret Pass Prospect in Mohave County, Arizona.

With these acquisitions, Fischer-Watt also reported that the value of proven and probable recoverable reserves to its interest from all gold and silver properties held by the company now exceeds $64,000,000, or approximately $8.00 for each of the company's 8,000,000 common shares outstanding.

Exploration and possible development of the Mystic Mine is part of a joint venture with Terra Technologies Corporation of Henderson, Nevada, and Total Erickson Resources Ltd. of Vancouver, B. C., which is funding the first $250,000 of initial exploration costs. Total Erickson and Fischer-Watt will expend the next $900,000 to earn a 50 percent interest in the project. Subsequent expenditures will be shared as follows: Fischer-Watt - 25 percent; Total Erickson - 25 percent; Terra - 50 percent, with Fischer-Watt and Total Erickson having the right to buy out Terra's interest for $2.5 million.

The Mystic Mine near Phoenix, Arizona, contains proven and probable reserves of 50,000 tons of ore grading 0.071 o/t gold. Active exploration will be directed toward confirmation of up to an additional 50,000 tons of similar grade ore, and the making of a production decision in late 1987 or early 1988 if sufficient additional reserves can be confirmed.

-more-

MYSTIC (f)

MYSTIC PROJECT
Maricopa County, Arizona

Location -

The Mystic project is located at the southern end of the Hieroglyphic Mountains, about 10 miles north of Sun City, Arizona.

Land Status -

Fischer-Watt Gold has under lease 149 unpatented lode claims and 468 acres of state prospecting permits, covering a total of about 3,400 acres.

Fischer-Watt Gold Interest -

FWGC has the right to earn a 50% participating interest in the Mystic project from Terra Technologies Corporation by expending $1.15 million on the project over two years or by bringing the project into production at no less than 100 tons per day.

Ore Reserves and Potential -

Total drill proven mineable reserves at the Mystic are 26,000 tons grading 0.71 o/t gold. In addition, there are probable open-ended reserves totalling another 24,000 tons of similar grade. Total drill proven and probable reserves are over 35,000 ounces of gold. In addition to the main vein structure, two parallel veins were cut by four drill holes which showed ore grade intercepts over mineable widths and may add to the reserves with further exploration.

Geology -

The Mystic area is underlain by Precambrian metavolcanic and metasedimentary rocks of the Yavapai Series. The metavolcanic rocks in the Mystic shaft area are predominantly mafic, however, the composition varies from felsic through mafic. The Precambrian units are folded and metamorphosed to the lower almandine-amphibolite facies.

The Precambrian terrain is unconformably overlain by Cretaceous to Tertiary volcanic rocks. Steeply dipping Cretaceous-Tertiary dikes of andesitic composition crosscut the Precambrian

MYSTIC

units and are spacially associated with ore.

Gold mineralization is associated with thin quartz-calcite stringers in west-northwest-trending fault zones cutting the metavolcanic rocks and frequently occurs footwall to clay altered Tertiary andesite dikes. Gold mineralization occurs over widths of 3 to 13 feet and has been drilled over a vertical range of 70 to 300 feet below the surface.

Exploration Program -

Terra Technologies Corporation has been retained by FWGC to implement a program of geological mapping, sampling, geophysics, trenching, and air-track and reverse-circulation drilling. This program should be completed within 6 months at which point a decision will be made to develop the mine or abandon the project.

SUMMARY REPORT ON THE MYSTIC PROJECT, ARIZONA

William H. Neumann

November 12, 1984

Location: The Mystic Project is a gold exploration property located approximately 20 miles NW of Phoenix, Arizona, in Maricopa County, just south of the Yavapai County line. The project has been broken up into two categories based on a Township division. These categories are designated as the Mystic I, which consists of all claims south of the T5N-T6N dividing line, and the Mystic II, which consists of all claims north of the T5N-T6N dividing line. The Mystic I consists of approximately 4640 acres of unpatented lode claims and state ground contained in Sections 1 through 14 of T5N, R1W and Sections 6 and 7 of T5N, R1E. The Mystic II, which is the largest portion of the project, consists of approximately 17,596 acres of unpatented lode claims and state ground contained in Sections 4, 5, 6, 7, 8, 9, 15, 16, 17, 18, 19, 20, 21, 22, 24, 27, 28, 29, 30, 31, 32, 33, 34, 35 of T6N, R1W; Sections 1, 2, 3, 7, 10, 11, 12, 13, 14, 22, 23, 24, 25, 26, 27 of T6N, R2W; Sections 34, 35, 36 of T7N, R2W.

Property: The Mystic I is made up of four claim groups and one section of state land held under Arizona Prospecting Permit number 08-87726. These four claim groups are designated as the Harding lease, the McCully lease, the Win Group, and the Bummer Group. The Harding lease consists of 6 unpatented Question lode claims and one unpatented lode claim known as the Gunbolt claim. The McCully lease consists of 22 unpatented lode claims known as the D&M claims. The Win group is made up of 96 unpatented lode claims and the Bummer group is made up of 75 unpatented lode claims.

The Mystic II is made up of two claim groups and two sections of state land held under Arizona Prospecting Permit numbers 08-87884 and 08-84305. The claim groups are the Win group, which consists of 671 unpatented lode claims, and the Burro group, which consists of 146 unpatented lode claims.

Ownership & Lease Agreement: The Question claims and the Gunbolt claim of the Harding lease were leased by Albert Harding, et al, to Ranchers and assigned to Ranchers Gold and Silver Exploration Program - 1980. These were subleased to Goldsil Mining and Milling in 1984. The Harding lease is for a period of ten years commencing January 21, 1980, and so long thereafter as production is being obtained. The lease has an advance royalty of $10,000/month. The royalty shall be reduced to $5,000/month when in the preceeding month fifty linear feet of underground development has been completed. On the Question claims, there is a 10% NSR on gold and silver, and a 5% NSR for metals other than gold and silver. On the Gunbolt claim, there is a 1% NSR overriding royalty to Harding, et al, and 10% of gross production to N. O. White. The annual assessment requirements performed by Ranchers have been assigned to Goldsil Mining and Milling.

The D&M claims of the McCully lease were leased by Dale McCully, et al, to Virgil and Elsie Caughran and assigned to Ranchers Gold and Silver Exploration Program - 1980. The lease period is for ten years commencing November 24, 1980, and so long thereafter as production is being obtained.

The McCu[illegible]ase has an advance royalty of [illegible]0,000/year. The advance royalty is credited against the production royalty which is 5% NSR. Ranchers performs the annual assessment requirements.

The Bummer group of unpatented lode claims were located by Coe & Van Loo Consulting Engineers and assigned to Ranchers Gold and Silver Exploration Program - 1980. The Bummer group was subleased to Goldsil Mining and Milling in 1984. Goldsil is now responsible for performing the annual assessment requirements.

The Win group of unpatented lode claims were located in 1980 and 1983 by Rocky Mountain Surveyors as an agent for Ranchers. They are assigned to Ranchers Gold and Silver Exploration Program - 1980 and Ranchers performs the annual assessment requirements.

The Burro group of unpatented lode claims were located in 1980 by Rocky Mountain Surveyors as an agent for Ranchers. They are assigned to Ranchers Gold and Silver Exploration Program - 1980 and Ranchers performs the annual assessment requirements.

Three sections of state land are being leased to Ranchers by the State of Arizona under Arizona Prospecting Permits. Section 2, T5N, R1W is being leased under Arizona Prospecting Permit number 08-87726. The lease is for five years commencing December 14, 1983. Section 32, T6N, R1W is being leased under Arizona Prospecting Permit number 08-87884. The lease is for five years commencing January 11, 1984. Section 16, T6N, R1W is being leased under Arizona Prospecting Permit number 08-84305. The lease is for five years commencing June 24, 1984. Under these lease agreements, Ranchers must expend $10/acre/year for the first two years and $20/acre/year for the next three years. Rental is $1/acre for each annual period. Each annual period, an application for renewal, plan of operation, and proof of expenditures must be submitted.

History: At the location of the present Mystic I-Harding lease, twelve unpatented lode mining claims were staked and filed by Albert Harding and Leith Pike in 1972 and 1973. Of the twelve, six claims were retained and another claim, the Gunbolt, was held by a lease from N. O. White. Harding seasonally explored the property by both core and rotary drilling for a total of about 4.5 miles of drilling in 83 hoes. For the first few years, the owners tried to find minable lead and zinc, and enriched copper-silver ore, but were not successful. In 1975, when they were contemplating abandoning the property, they drilled hole 23 which encountered 15' of .84 oz/ton gold. In January of 1979, Harding and Pike incorporated "Mystic Gold, Inc." and acquired equipment to sink a shaft centered on hole 25. Hole 25 contained 3 zones of mineralization, 15' of .33 oz/ton gold, 20' of 1.64 oz/ton gold, and 15' of 1.39 oz/ton gold. In February, the shaft was collared to 10' in anticipation of pouring concrete for a head frame. Operations were quickly curtailed when the small work force of three miners celebrated payday too extensively and walked off the job. After waiting four days for his crew to return, Harding decided that he needed to joint venture with or lease the property to a mining company.

Ranchers Gold and Silver Exploration Program - 1980 acquired a lease on the property in late 1979. In the summer of 1980, Ranchers began an

angle core drilling program that culminated with the completion of 70 holes by the end of February 1981. Although the drilling results were encouraging and many ore grade intercepts were encountered, it was decided to temporarily terminate the drilling program in 1981 and evaluate the results. One more angle core hole was drilled in the summer of 1982 to increase the down dip extension of the ore zone, but proved unsuccessful. During the fall of 1980, an extensive claim staking and land acquisition program was initiated. From extensive surface sampling and mapping, conducted over several field seasons by Ranchers, a number of scattered gold prospects and shows were found on both the Mystic I and II areas. Evidence of prospectors' activities can be seen throughout the property.

In the fall of 1982, Ranchers signed a deal for a joint venture on the Mystic I with American Copper and Nickel Co., a subsidiary of International Nickel Company. ACNC drilled eight holes in early 1983 which encountered minor to ore grade gold mineralization. 1982 and 1983 were financially disasterous years for ACNC, and they elected not to participate any further with the joint venture.

In the summer of 1983, four vertical rotary holes were drilled to test the east-west strike extensions of the ore zone. The hematitic red zones were encountered, but only traces of gold were detected. The drilling extended the strike length of the red zone approximately 500' to the west.

In 1984, Ranchers entered into an agreement with Goldsil Mining and Milling. Ranchers leased the Question, Gunbolt, and Bummer claims to Goldsil, which plans to develop an economic gold ore body. They are planning to sink a decline on the property for underground exploration purposes.

Geology: The geology of the Mystic area consists mainly of metavolcanics and metasediments assigned to the Precambrian Yavapai Series and unconformably overlying Cretaceous and Tertiary volcanics. A few mafic dikes, quartz veins, andd calcite veins, all of which appear to be related to the younger volcanics, cut the Precambrian rocks. Quaternary alluvium, colluvium, and caliche are present along stream valleys and plains and locally mask the bedrock.

The Precambrian metamorphics of the Yavapai Schist consist mainly of metavolcanic and subordinate metasediments deposited and metamorphosed in a major eugeosyncline about 1,730 to 1,820 million years ago in a zone trending northeast through central and western Arizona. This eugeosynclinal terrane was intruded by batholiths about 1,700 to 1,740 million years ago and again about 1,465 to 1,410 million years ago. The Yavapai consists of memtamorphosed basaltic, andesitic, dacitic, quartz latitic, and rhyolitic flows, tuffs, and breccias along with tuffaceous sandstone, chert, iron formation, shale and rare carbonates.

Gold mineralization at the Harding lease of the Mystic I occurs as native gold in an east-west trending, steeply dipping shear zone contained in the Precambrian Yavapai. The gold mineralization is associated with strong hematitic alteration and may or may not be associated with quartz. Intermediate and mafic metavolcanic units of the Yavapai appear to be best suited to gold mineralization. The red sheared zone has an average

thickness of 45' and ranges up to 70'. It has a southerly dip of 67° and can be traced by core and rotary drill holes for a strike length of 1100'. Originally, it was thought that the mineralization of the Mystic I was stratabound and Precambrian in age. After examining all of the drill data and surface mapping, it now appears that the mineralization occurs as a hematitic shear zone of epithermal origin. Although high grade ore intercepts have been encountered, Ranchers has felt that the mineralization is too spotty and discontinuous to calculate ore reserves or initiate underground mining activities. Some of the best gold intercepts delineated by angle core drilling are: 17' of .70 oz/ton Au in R-1, 15' of 1.28 oz/ton Au in R-2, 8' of .40 oz/ton Au in R-4, 5' of .30 oz/ton Au in R-12, 8' of .51 oz/ton Au in R-14, 12.5' of .27 oz/ton Au in R-35, 15' of .24 oz/ton Au in R-40, 4' of 2.10 oz/ton Au in R-55, and 8' of .64 oz/ton Au in R-56.

D&M Claims, Mystic I:

The D&M claims are located in Sections 2, 3, 10, and 11 of T5N, R1W. Two parallel red hematitic shear zones are the main targets of exploration on the D&M claims. These shear zones are approximately 120' apart, strike N30°E, and dip 50°-60°SE. The zones run parallel to the southwest for 940'. At this point, the eastern zone disappears under colluvium, but the western zone makes a right angle turn and heads west for another 800', maintaining its same angle of dip but in a more southerly direction. This host rock is a Precambrian phyllite. The red oxidized phyllitic shears contain quartz veinlets. Surface values up to .15 and .23 oz/ton gold have been encountered. The area contains many hornblende intrusions with associated quartz and copper oxide staining. A rhyolite porphyry intrusive terminates the shear zone to the west and the colluvial cover masks any further strike extensions to the northeast. Several prospect cuts have been encountered along the zones. Ranchers has drilled 3 angle core holes and 19 vertical rotary holes on the D&M claims. Only low grade gold values have been encountered in the drill holes.

Cactus Jack Area, Mystic II;

The Cactus Jack area is a large exploration area, encompassing most of Sections 29 and 30 of T6N, R1W. The area contains multiple hematitic red sheared zones hosted by Precambrian intermediate to mafic metavolcanics. The sheared zones and the host rock both have a north to northeast trending strike and dip to the northwwest. Many of these shears contain quartz and/or calcite veinlets with associated limonite in fracture fillings and vugs. Surface values up to .55 and .99 oz/ton gold have been found in a shallow prospect pit in the area. Little evidence of past prospecting can be found in the area. Much of the area is masked by colluvium and caliche. A total of 29 vertical rotary holes have been drilled in the area, most of which have been barren of mineralization. However, one vertical hole encountered 5' of .20 oz/ton gold between 25' and 30'.

Saddleback Area, Mystic II;

The Saddleback area is located in Section 34 of T6N, R1W. The main exploration emphasis is a series of narrow quartz veins of varying strikes and

dips. The widths on the quartz veins range from 1.5' to 2.0'. Unaltered Precambrian felsic metavolcanics are the host rocks for the veins. Hematite and copper oxide staining is abundant in association with quartz on the rubble piles at several prospect pits and on the dump of a deep shaft with some drifting. Surface assays of the quartz vein material range up to .07 and .12 oz/ton gold. Much of this area is also covered by colluvium, making strike extension determinations on the veins difficult without drilling.

Windy Well Area, Mystic II:

This area is located in Sections 27 and 28 of T6N, R1W. It is a quartz vein target with 2200' of strike length hosted by Precambrian intermediate metavolcanics. The metavolcanics strike northeast and dip steeply to the northwest. The vein is 1.5' to 2.0' wide, strikes N15°E to N35°E and dips 60°SE. An andesitic dike forms the hanging wall of the vein for the entire exposed strike length of the vein. The vein and dike are offset in several places by faulting. Several shafts, prospect pits, and one adit with approximately 150' of tunnel can be found along the vein structure. Some of the surface assays of the vein are: 2.2' of .30, 1.5' of .11, .23, .38, .54, and 1.04 oz/ton gold. The Windy Well vein is the only place on the Mystic property, other than drill hole R-2 on the Harding lease, where visible gold has been seen. Four angle core holes have been drilled into the vein to intercept it at -100'. Only low-grade mineralization was encountered. The vein is terminated to the south by a rhyolite porphyry intrusive and is covered by colluvium and Tertiary volcanics to the north.

Four Shafts Area, Mystic II:

The Four Shafts area is located southwest of the Cactus Jack area in Sections 30 and 31 of T6N, R1W. The exploration target is a 3' wide quartz vein which pinches and swells. It strikes N20°E, dips 20° to 60°SE, and has 200' of surface exposure. The vein is traceable for another 350' by float mapping for a total projected length of 550'. The colluvial cover is responsible for the poor exposure of the vein. The vein is contained in a red hematitic sheared zone hosted by Precambrian intermediate metavolcanics. The shear zone ranges from 50' to 75' in width, strikes N20°E, but dips steeply to the northwest which is opposite to the dip of the quartz vein. Four shafts have been sunk along the 200' of limited vein exposure. One of the shafts has a sizeable dump and appears to have had extensive workings. The quartz has abundant hematite associated with it and considerable copper oxide staining. Surface assays of .25, .34, .36, 1.61, and 5.60 oz/ton gold have been taken. Five angle reverse circulation rotary holes have been drilled to intercept the vein at depth. Mineralization was negligable except for hole FS-2 which encountered 5' of .13 oz/ton gold at 180'. The gold mineralization was in the hematitic shear zone, not the quartz vein. No appreciable gold mineralization was encountered at the projected intersections of the drill holes and the vein.

Section 32, Mystic II:

Section 32 is owned by the State of Arizona and leased to Ranchers. It is located in T6N, R1W. The main exploration emphasis has been on two narrow, parallel quartz veins in the northwest quarter of the section. Both

of these veins strike N10°E and dip 59° to 64°SE. The eastern vein has an exposed strike length of 650' and an average width of 1.5'. There are a few prospect pits on the vein and surface assays of 1.5' of 1.10 and 3.10 oz/ton gold have been taken. The western vein has an exposed strike length of 1300' and an average width of 1.4'. One shaft and several prospect pits are evident along the vein. Assays of 1.2' of .08 and .50 oz/ton gold have been taken on the vein. The two veins are approximately 80' apart and contain abundant hematite and copper oxide staining. Three angle core holes have been drilled to intersect these veins at depth. Only trace to low grade gold assays were encountered. Just to the west of these veins, another narrow quartz vein with the same strike and dip is exposed. It has a surface trace of approximately 400'. One sample taken on the vein contained .27 oz/ton gold. Another narrow, 700' long quartz vein is located near the center of the section. A shallow shaft has been dug on the vein. Surface samples ran up to .06 oz/ton gold. In Section 31, near the western edge of Section 32, a 300' long quartz vein is exposed. A very deep shaft has been sunk on the vein. This vein also strikes N10°E and dips 85°SE. A .23 oz/ton gold sample has been taken on the vein. All of these veins are hosted by northeast-trending Precambrian felsic metavolcanics, which dip from 48° to 81°NW. From surface sampling, it has been determined that many other scattered traces of gold occur throughout the section.

Section 35, Mystic II:

This section is located in T7N, R2W. It was staked in 1983, after reconnaissance mapping and sampling, proved out some potential in the southeast quarter of the section. The main target is a 2' to 3' quartz vein that can be traced for 800'. It has a north-south strike, and almost vertical dip. Hematite and strong copper oxide staining are associated with the quartz vein. Assays on the vein ran .05, .09, .11, .25, and .63 oz/ton gold. Two shafts, one adit, and numerous prospect pits have been excavated along the vein. The vein is hosted by Precambrian intermediate metavolcanics. Further mapping and sampling of the section has turned up other significant assays. They are .06, .07, .14, .19, and 1.24 oz/ton gold, occurring in several quartz veins with associated hematite vein type targets. More detailed mapping and sampling is needed on this Section.

Geronimo, Mystic II:

The Geronimo is located in Section 5 and 6 of T6N, R1W. The exploration emphasis here is a 1' to 4.2' wide quartz vein contained in a 4' to 10' wide red hematitic shear zone, hosted by intermediate metavolcanics. Two rather deep shafts and several prospect pits are located on the vein. The property was last worked in the 1960s. The foundation for a small mill can be seen just below the northern-most shaft. The vein can be traced for 750', strikes N15°W to N32°W, and dips 70° to 74°NE. Precambrian intermediate metavolcanics which strike NE and dip approximately 70°NW are the host rocks for the Geronimo vein. The extensive colluvial cover masks any further extensions of the vein. Surface assays of 3.8' of .28, 4.2' of .33, .48, and 1.16 oz/ton gold have been taken along the vein. five angle core holes have been drilled to intersect the vein at depth. One hole was abandoned due to circulation problems; one hole, G-5,

intersected [illegible] of .08 oz/ton gold; and the other [illegible]ree contained only traces of gold mineralization.

Buick Prospect, Mystic II:

This area is located in Section 14 of T6N, R2W. Many prospects, shallow shafts and one small adit dot the area. The exploration emphasis of this activity has been several narrow quartz veins with strong copper oxide staining and abundant associated hematite. Most of these veins appear to be short, with the longest being 150' in length. The maximum mineralized thickness observed was 2.2' which assayed .05 oz/ton gold. Other assay values taken were .10 and .21 oz/ton gold. These veins are hosted by Precambrian felsic to intermediate metavolcanics which strike NE and dip 78° to 80°SE. This area adjoins a Tertiary intrusive porphyry plug.

Owl Shaft, Mystic II:

The Owl Shaft area is located in Section 25 of T6N, R2W. This area contains many northeast trending, northwest dipping red hematitic shear zones contained in a Precambrian phyllite. These multiple red zones contain highly contorted and convoluted bedding in places. Some quartz veinlets are associated with the shears. Surface sampling of the area has revealed only traces of gold mineralization. One shaft, sunk through colluvium into a red hematitic shear, and a couple of shallow prospect pits can be seen in the area. This area is just south of the Kaiser Steel claims which cover most of the Precambrian Iron Formation exposure in the Mystic Area. The Iron Formation is a series of beds made up of predominently specularite, magnetite, hematite, and quartz. The formation extends for several miles and is approximately one mile wide. Sampling of most of the test pits and tunnels on the Kaiser Steel claims indicated only low-grade mineralization in the range of .01 to .02 oz/ton. One narrow bed of Iron Formation outcrops in the Owl Shaft area. No significant gold values have been found.

Exploration: Exploration on the Mystic property has consisted of several drilling programs, extensive surface mapping and sampling programs, and a geophysical program conducted by ACNC which was limited to the Harding lease. The drilling programs were conducted from June of 1980 through August of 1984. A total of 106 holes have been drilled on the Mystic I by Ranchers and ACNC. Of these, 83 have been angle core holes and 23 have been vertical percussion holes. The mineralized hematitic shear zone on the Harding lease has been the main emphasis of exploration drilling. Seventy-one angle core holes and 4 vertical percussion holes were drilled by Ranchers and 8 angle core holes were drilled by ACNC. Some of these core holes have intercepted exceptionally high-grade gold mineralization with the best intercept being 5' of 3.45 oz/ton gold contained in hole R-2. Drilling to date has not been able to establish the existance of a commercially minable deposit due to lack of continuity of the gold mineralization between holes.

The other area of concentrated drilling on the Mystic I has been the D&M claims. Three angle core holes and 21 vertical percussion holes were drilled here. One additional angle core hole was drilled just inside

the northern edge of Arizona State Section The total footage drilled on the Mystic I is 34,484'.

Sixteen angle core holes and 37 percussion holes, a total of 53 holes, have been drilled on the Mystic II. The drilling was conducted on various targets over several seasons to test for ore grade gold mineralization and satisfy annual assessment commitments. The drilling consisted of 4 angle core holes to test the Windy Well vein, 4 angle core holes at the Geronimo, 4 angle core holes on Section 32 of T6N, R1W, 2 angle core and 3 vertical percussion holes on Section 16 of T6N, R1W, 2 angle core holes on Section 2 of T6N, R2W, 29 vertical percussion holes on the Cactus Jack area, and 5 angle reverse circulation rotary holes on the Four Shafts vein. Total drilling on the Mystic II amounted to 10,693'. Tables 1 and 2 summarize the drilling results on both the Mystic I and Mystic II.

Mate

STATE MINE INSPECTOR

APR 18 1984

Mystic Mine

Goldsil

MINING & MILLING, INC.

Academy Place 1, Suite 445
7333 West Jefferson Avenue
Lakewood, Colorado 80235

(303) 989-0895

Start

April 16, 1984

Arizona State Mine Inspector
705 State Capitol, West Wing
Phoenix, Arizona 85007

Dear Sir:

Goldsil Mining and Milling, Inc.
Academy Place 1, Suite 445
7333 West Jefferson Avenue
Lakewood, Colorado 80235
(303) 989-0895

Hereby gives notice of its intent to start mining activities in the Mystic Mine area, Maricopa County, Arizona.

1. Type of operation will be underground mining with the primary access being a decline. The secondary access will be by a ventilation raise. The operation will disturb less than five (5) acres.

2. The principal product to be produced will be gold.

3. The legal description of the property is as follows:

Name of Claim	Owner	AMC Number
Gunbolt	Harding, et al	30976
Question #1	Harding, et al	30970
Question #2	Harding, et al	30971
Question #6	Harding, et al	30974
Question #7	Harding, et al	30975

Located in Sections 11 and 2, Township 5 North, Range 1 West, Maricopa County, Arizona.

I also request a copy of the Arizona State Mining Code.

Sincerely,

Gilbert Rodriguez

Gilbert Rodriguez
Vice President of Mining Operations

GR/kmb

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine: Mystic Mine

Date: March 26, 1984

District:

Engineer: Nyal J. Niemuth

Subject: Field Interview

Information from: Rick Renn, Goldsil Mining and Milling.

Goldsil Mining and Milling has acquired the Mystic property which consists of Al Harding's Question and Gun Bolt Claims, plus the Bummer Claims of Ranchers. Rancher Exploration and Mining is retaining the rest of what they call Mystic I and II, composed mainly of the Win Claim Group. Goldsils obligations consist of a relatively large monthly lease payment to Mr. Harding and a production royalty to Ranchers. The monthly payment and drilling information from Ranchers have led to a decision by Goldsil's management to bring the property to production as soon as possible.

Rancher's Exploration drilling at the Mystic consisted of 75 holes. The first 71 of these were nx core to define the ore body. The last 4 were rotary holes drilled to the east and west of the ore body checking for extensions of the east-west shear. The shear was found by these holes although the mineralization was described as poor. The drilling has suggested a lithic control for the mineralization which tends to be of high grade (often plus 1.5 oz/ton Au) but spotty. Underground drifting and bulk sampling however will be required to confirm that speculation.

cc: Tucson Office ✓

RANCHERS 10-K, 1983

The results of drilling at the Cutler Creek property were disappointing, and the property has been abandoned.

The drilling at the Golden Grizzly appears to have delineated a relatively small deposit which may be commercially minable at higher than present gold prices.

The results of drilling at the Mystic and the Adelaide Crown properties have been encouraging, and the Company believes that additional exploration should be conducted to determine whether or not commercially minable deposits exist. However, the initial capital of the partnership has been expended, and plans for financing additional exploration of these properties are being evaluated.

Following the initial drilling at the Mystic, the partnership acquired rights to approximately 20,000 additional acres in the vicinity of the original Mystic property where the geologic formation is similar, giving it control of approximately 22,600 acres of mineral rights. The southern portion of the acreage, including the original Mystic holdings on which drilling was performed, contains about 4,600 acres and has been designated as the Mystic I property. The northerly portion, of about 18,000 acres, has been designated as the Mystic II property. Although drilling on the original Mystic property has established the existence of significant gold mineralization in the area, it has not been possible to establish the existence of a commercially minable deposit due to lack of continuity between some of the holes containing gold mineralization of ore grade and thickness.

As of December 6, 1982, the partnership had entered into a joint venture with American Copper and Nickel Company, Inc. ("ACNC") to provide for the performance of additional work on the Mystic I property. However, on May 17, 1983, ACNC elected to withdraw from the venture after completing more than 2,000 feet of drilling and advised the partnership that its limited drilling had not produced evidence of the type of deposit it was seeking. A considerable amount of additional drilling will be required to determine the extent of the mineralized zone and to further examine continuity between existing ore grade intercepts in order to determine whether or not a commercially minable deposit of gold is present.

More than 20 areas have been identified on the Mystic II property as it is now constituted where surface sampling has indicated the presence of significant gold mineralization in what appears to be the same geologic environment as that on which the original Mystic drilling was performed. A major drilling program would be required to fully evaluate this property. However, no substantial additional drilling will be undertaken until additional financing has been obtained.

3. Mining Claims: F.L.P.M.A.--Recordation of Mining Claims--timely filing; REGULATIONS--Applicability.

The dates of location of mining claims as shown on the notices of location recorded in compliance with state law will be treated as controlling where, after rejection by BLM of the location notices as untimely filed, claimant alleges that the notices are untrue as the dates shown are scrivener's errors.

APPEARANCES: H. Mason Coggin, pro se.

OPINION BY ADMINISTRATIVE JUDGE FRAZIER

This appeal is taken from a decision dated July 31, 1980, by the Arizona State Office, Bureau of Land Management (BLM), declaring the Bummer #19 and #20 mining claims abandoned and void for failure to file timely location notices, as required by section 314 of the Federal Land Policy and Management Act of 1976, 43 U.S.C. § 1744 (1976), and 43 CFR 3833.1-2(b).

[1] Under 43 CFR 3833.1-2(b), the owner of an unpatented mining claim located after October 21, 1976, must file with BLM a copy of the official record of the notice of location within 90 days after the date of location, failing which the claim shall be declared abandoned and void under 43 CFR 3833.4(a). Topaz Beryllium Co. v. United States, 497 F. Supp. 309 (D. Utah 1979) (appeal pending); Carl Dowler; 44 IBLA 192 (1979);[a] M. J. Reeves, 41 IBLA 92 (1979);[b] William E. Rhodes, 38 IBLA 127 (1978);[c] R. Wade Holder, 35 IBLA 169 (1978);[d] and Northwest Citizens for Wilderness Mining Co., Inc., 33 IBLA 317 (1978),[e] aff'd, Northwest Citizens for Wilderness Mining Inc., v. Bureau of Land Management, Civ. No. 78-46-M (D. Mont. June 19, 1979).

Appellant filed its notices of location with BLM on January 22, 1980, and states on appeal that its location notices were inadvertently dated January 2, 1979, that the true date of location was January 2, 1980. Both notices were recorded in Maricopa County, Arizona, on January 9, 1980.

[2, 3] The date of location is determined in accordance with the law of the state where the claim is situated. 43 CFR 3833.0-5(h); P & S Mining Co., 45 IBLA 115 (1980).[f] Under the law of the State of Arizona, where these claims are situated, the date of location is that

a) GFS(MIN) 8(1980)
b) GFS(MIN) 41(1979)
c) GFS(MIN) 126(1978)
d) GFS(MIN) 56(1978)
e) GFS(MIN) 15(1978)
f) GFS(MIN) 26(1980)

specified by the locator on the notice of location filed with the record office. Ariz. Rev. Stat. Ann. § 27-202 (1976). In this context we note that the location notice prepared by appellant and recorded in the official record of Maricopa County shows that appellant entered as the date of location January 2, 1979. Thus, this is the date of location which determines whether appellant timely filed copies of the notices with BLM. John C. and Theresa K. Buchanan, 52 IBLA 387 (1981)g As appellant did not file copies of the notices with BLM until more than a year after the aforementioned date, he clearly did not comply with 43 CFR 3833.1-2(b), and BLM properly declared the claims abandoned and void. 1/

Therefore, pursuant to the authority delegated to the Board of Land Appeals by the Secretary of the Interior, 43 CFR 4.1, the decision appealed from is affirmed.

g) GFS(MIN) 64(1981)

Gail M. Frazier
Administrative Judge

We concur:

Edward W. Stuebing
Administrative Judge

Anne Poindexter Lewis
Administrative Judge

1/ On August 14, 1980, appellant filed with BLM amended notices of location for these claims which were recorded in the County Office on August 4, 1980, showing a location date of August 1, 1980. These filings, however, do not relate back to the defective filings considered in this appeal, but must be considered relocation notices as of August 1, 1980, subject to intervening rights of third parties or the United States.

RANCHERS ANNOUNCES JOINT VENTURE WITH AMERICAN COPPER AND NICKEL - Ranchers Exploration and Development Corporation of Albuquerque and Ranchers Gold and Silver Exploration Program have announced that the Partnership has entered into a joint venture with American Copper and Nickel Company. The venture will be conducting exploration for gold on the Partnership's Mystic I property, which is located near Phoenix, Arizona and contains about 4,600 acres.

HOMESTAKE ANNOUNCES MANAGEMENT CHANGES - Gary Boyer has been named to be in charge of "day-to-day" operations at Homestake Mining Company near Grants. Boyer said John Parker, operations head, has been assigned to some special jobs and he will be traveling quite extensively. In other assignments at Homestake, Robert K. Jaedicke was elected to the board of directors to succeed Clifford V. Heimbucher who retired on December 31 after 16 years as a member of the board.

WESTERN MINING DIVISION OF UTAH INT'L REORGANIZED - The Western U. S. Mining Division of Utah International, Inc. has been reorganized by division chief John Atkins. Jim Mainard has been transferred from San Juan Coal Co. to a new post as manager of New Mexico services, including personnel, accounting and environmental quality operations. Bob Diederich is now Navajo manager of Navajo Mine at Fruitland, replacing Wes Karna, who became mine manager for the San Juan Coal Co. Ed Pettigrew will become mine superintendent for San Juan Coal Co. and Allan Barber will be mine superintendent for the Navajo Mine. John Frangos, previously of the San Francisco office, became assistant mine manager under Diederich at Navajo Mine.

RANCHERS ANNOUNCES PROMOTIONS - Ranchers Exploration and Development Corporation has announced the promotion of James M. Rosel to secretary of the company and Peggy McDonough to assistant secretary. Rosel has formerly been assistant vice president and assistance secretary of the company. McDonough had previously served as administrator-land management for the company.

N.M. TECH RESEARCHERS GET $90,000 TO STUDY RADON - Dr. Marvin Wilkening, a New Mexico Institute of Mining and Technology physicist, and Dr. Stephen Schery, also of New Mexico Tech, have received $90,000 from the U. S. Department of Energy to study how radon escapes from soil, rocks and building materials and then spreads thoughout a structure. The contract will enable Wilkening and Schery to pay special attention to closed environments as they continue their work on radon transport.

"NEW MEXICO GEOLOGY" INCLUDES N.M. ENERGY AND RESOURCES MAP - A map of New Mexico's energy and mineral resources is included in the November 1982 edition of "New Mexico Geology" published by the New Mexico Bureau of Mines and Mineral Resources. The map is part of a set that includes directories and a map of active mines and processing plants in New Mexico. The set is described in an accompanying article by U. S. Nuclear Regulatory Commission geologist Mark Logsdon. Contact the Bureau, Socorro, NM 87801 for additional information.

Wilson 1

IN REPLY REFER TO:

United States Department of the Interior

OFFICE OF HEARINGS AND APPEALS
INTERIOR BOARD OF LAND APPEALS
4015 WILSON BOULEVARD
ARLINGTON, VIRGINIA 22203

Bummer 19420

H. MASON COGGIN

IBLA 80-842 Decided April 27, 1981

Appeal from decision of the Arizona State Office, Bureau of Land Management (BLM), declaring mining claims abandoned and void. AMC 94431 and AMC 94432.

Affirmed.

1. Mining Claims: F.L.P.M.A.--Abandonment--Location Subsequent to October 21, 1976--Recordation of Mining Claims; REGULATIONS--Applicability.

The owner of mining claims located after Oct. 21, 1976, must file copies of the notices of location of the claims with BLM within 90 days of the dates of location of the claims, failing which the claims are properly declared abandoned and void.

2. Mining Claims: F.L.P.M.A.--Recordation of Mining Claims; REGULATIONS--Applicability; WORDS AND PHRASES--Date of Location.

"Date of Location." The date of location of a mining claim is determined in accordance with the law of the state where the claim is situated. Under Arizona law, it is the date specified on the notice of location filed with the local recorder's office.

INDEX CODE:
43 CFR 3833.0-5(h)
43 CFR 3833.1-2(b)
43 CFR 3833.4(a)

GFS(MIN) 133(1981)

A. C. HARDING
10026 Mt. View Rd.
Sun City, AZ 85351 (Ph: 602-933-2628)

September 13, 1979

INFORMATION REGARDING A POTENTIAL SMALL GOLD MINE NEAR PHOENIX, ARIZONA

SUMMARY: Owners are looking for a company qualified to sink an exploration-development shaft and to determing the feasibility of an underground gold mining operation. Owners are willing to lease or to participate in 50% of the cost.

POTENTIAL: From core and hammer-drill holes along 168' of strike, indicated tonnage to 250' vertical is 20,000 averaging 0.70 oz. in free-milling gold with several dollars in silver. Potential tonnage is 10, 20, or 30 times that much, contemplating extensions both laterally and vertically. Best values to date are at the deepest depth; shown on Cross-Section VI herein, in Hole H12, eight consecutive hammer-drill samples, between 210' and 250', average 3.53 oz. Au.

OWNERSHIP: Unpatented mining claims held since 1972 by Harding and Leith Pike, both of Sun City, d/b/a Mystic Mining Co., a partnership. Harding is a mining engineer, a former Chairman of the Western Governors' Mining Advisory Council, recently retired after 32 years as a founding partner of Black Hills Bentonite Co., Wyoming. He is a former president of the Wyoming State Senate and a Past Grand Master of Masons in Wyoming. Pike is a retired oil company accountant.

HISTORY: A dozen lode mining claims were filed by Harding and Pike in 1972 and 1973, six still retained, and another claim is held by lease. The property has been seasonally explored by contract drilling, for a total of about 4½ miles in 83 holes. For the first few years, owners tried to find minable lead and zinc, and enriched copper-silver, in a different part of the property, but did not find any sulfides, nor have they yet. In 1975 when they were contemplating abandoning the property, they drilled Hole 23 near Hole No. 3 which had been the best "gold hole". Since then they have concentrated further efforts in that area.

In January, 1979, the two partners incorporated "Mystic Gold, Inc." and acquired equipment to sink a shaft centered on Hole 25. In February the shaft was collared to 10' in anticipation of pouring concrete for a headframe. Operations were quickly terminated when the small workforce, three miners imported from Colorado, celebrated payday too extensively. By the time Harding said, "The hell with it!", they had left unguarded in the desert an Air-Stream trailer, new light plant, compressor, drill, etc., hoist truck, water truck, pickup, tool shed, either unlocked or with keys laying around for everything, including two powder magazines. Four days later, after Harding had helped unload a truck full of new lumber and his crew had not yet returned, he decided he was too old to want to fight that kind of battle along with all the others and would seek an alternative - a lease or a joint venture, with a company able to provide management. No equipment is on the property now.

GEOLOGY: Country rock is pre-Cambrian schist, standing almost vertical, with foliation striking almost north-south. It has been cross-cut by andesite dikes, dipping steeply south. Close to the surface, and in places at depth, the dikes

CONTEMPLATED EXPLORATION-DEVELOPMENT: Sampling a gold vein by core drilling is usually inconclusive. It is proposed to sink a vertical shaft (5' x 7') to encompass Hole 25 to a depth approximating 170', then drift (5' x 7') to the west.

An inclined shaft (71°) is an alternative and would be in potential ore, averaging .62 oz., between 70' and 200', but would probably require hanging-wall timbering and be more expensive to sink and use.

The vertical shaft would be in waste rock to 115'. Between 120' and 170', ten 5' samples average .77 oz. AU. (From 120' to 220', 20 samples average .73 oz.) It is proposed that a drift be started toward the west someplace in the interval between 150' and 170', which averages 1.63 oz. AU.

It is contemplated that 170' of shaft and 200' of drift would be speculative but sufficient to determine the advisability of proceeding further.

Capital expenditure should be limited, perhaps by renting a compressor and a winch-truck. The truck would be used not only for hoisting but for hauling water for drilling and timbers necessary for ladders and platforms.

PROPOSAL: Owners prefer to lease to a dependable operating company and are willing to underwrite all or most of the cost for the contemplated work. They would not require any down payment or advance royalties for calendar year 1978 from an operator who would agree to initiate the proposed work and proceed diligently. If the operator should determine at any time during that period that further work is non-productive he could surrender the lease and owners would reimburse him as follows:

For shaft-sinking:	$200 a foot, up to 170 feet.....	$34,000
For drifting:	80 a foot, up to 200 feet.....	16,000
		$50,000

TERMS OF LEASE: 5% of Gross production
Plus 5% of Gross production after deducting $30 a Ton.

Minimum advances, $2,000 a month beginning Jan. 1979.

RECEIVED
AUG 6 1979
DEPT. MINERAL RESOURCES
PHOENIX, ARIZONA

A. C. HARDING
10026 Mt. View Rd.
Sun City, AZ 85351
Ph: 602-933-2628

July 30, 1979

INFORMATION REGARDING
A POTENTIAL SMALL GOLD MINE
NEAR PHOENIX, ARIZONA

POTENTIAL: Extensive drilling, including 15 hammer-drill holes in April-May, 1979, in a small area on mining claims 9 miles north of Sun City, indicate good potential for a small underground gold mine (50 to 100 T/day), averaging about 0.7 oz. in free-mlling gold, with a couple of dollars in silver. Total tonnage is unknown ,but the area drilled, 168' along strike and to a depth of 250', includes about 20,000 tons, with probable extensions both laterally and vertically. The best values to date are at the deepest depth; in Hole H12, eight 5' samples between 210' and 250' average 3.53 oz. AU.

PROPOSAL: Owners will lease to or participate in a joint venture with a company which has established gold-mine management capability. Purpose is to sink an exploration-development shaft to at least 170' and to do some drifting at about 160'.

OWNERSHIP: Mining claims have been held since 1972 by Harding and Leith Pike, also of Sun City, d/b/a Mystic Mining Co., a partnership. Harding is a mining engineer, a former chairman of Western Governors' Mining Advisory Council, and recently retired as a founding-partner of Black Hills Bentonite Co. in Wyoming, after 32 years. He is a former president of the Wyoming State Senate and a Past Grand Master of Masons in Wyoming. Pike is a retired oil company accountant.

HISTORY: A dozen claims were filed by Harding and Pike in 1972 and 1973, six of them recently relinquished. Another claim is held by lease. The claims have been seasonally explored by core and hammer drilling, for a total of about 4½ miles in 83 holes. For the first few years owners tried to find minable lead and zinc (and perhaps copper-silver) in a different part of the property but did not find any sulfides, nor have they yet. In 1975, contemplating abandoning the property, they drilled Hole 23, near Hole No. 3 which had been the best "gold hole." Since then they have concentrated further efforts in that area. In January this year they incorporated as 'Mystic Gold, Inc.' and acquired equipment to sink a shaft centered on Hole 25. In February the shaft was collared to 10'. Operations were quickly terminated when the workforce, three miners, celebrated payday too enthusiastically and left all the equipment unguarded for four days. No equipment or facilities are at the site now. The owners decided they weren't willing to cope with an irresponsible crew, along with all the other problems these days, but would try to find someone else to do the managing. Additional contract drilling in April and May, Holes H1 to H15, enhanced the property's potential.

GEOLOGY: The country rock is pre-Cambrian schist, almost vertical, with foliation striking pretty much north-south. It has been cross-cut by andesite dikes, dipping steeply to the south. Close to the surface, the dikes are relatively less altered and unmineralized. At depth they are quite altered and soft (locally termed "red-stuff"), or have altered the footwall schist, accompanied by oxidation and mineralization, so it seems indistinguishable in drill samples. Owners theorize that the gold was introduced subsequent to

the dikes, through a channel or fracture not identifiable in drill samples. It is possible that the ultimate sucess of a mining venture will depend on ability to recognize and follow underground a filled fracture or indicator which is not obvious in the very fractured and soft core-drill samples or the crushed hammer-drill samples. A complicating factor is the lack of traceable outcrops. A study of Cross Section VI (aligning the two sheets thereof) suggests an interesting theory: (a) in the deeper holes, beginning at 68' in Hole No. 3, there has been gold mineralization beneath the dike shown; (b) the better values, in the deeper hole, (25, 29, H12) seem to be dipping more steeply and line up with the inordinately high dike found in Hole 28; so, are there two intersecting dikes, one at about 63° and another at about 83°? - with the best values in the steeper one (a straight edge along the dike shown between Holes 28 and 25 lines up with the hanging wall of the ore shoot found in Hole H12). If so, the best values could continue downward almost vertically. Indicative perhaps of a steep dip, a hole 6' south of H12 averaged only a few hundredths of an oz. AU. Also, at the west end, in Hole H2, in each of two 15' sections, three samples averaged 1.14 oz. and 1.37 oz, and a total of 95' between 145' and 240' averaged .45 oz. However, a hole 6' south of H2 showed only minimal values and could be in the hanging wall of the ore shoot.

The owners are reluctant to space and drill additional holes only a few feet apart, because with a steeply dipping vein the success ratio would be low, aggravated by holes drifting from the vertical with increasing depth. In the section of Ore Shoot "A", it seems obvious that even a few feet of bottom-hole deviation for any of Holes 25, 29, or H12 would completely miss the downward extension of a minable-width vein. An attempt in 1977 to undercut the area with 60° and 70° angle holes found good values only in A6. Directional deviation is especially suspected in the angle holes because they were all drilled at extremely acute angles to the schist laminations.

AVAILABILITY: The owners are aware that the prospect is still quite speculative. Therefore, they would consider a reasonable leasing proposal to a qualified operator, or a joint venture with such an operator, contemplating a specific initial program, such operator to be financially and managerially competent.

ALBERT C. HARDING

~~77 Magnolia~~
~~Casper, Wyoming 82601~~

10026 Mt. View Rd.
Sun City, Ariz. 85351
933-2628

August 3, 1979

RECEIVED
AUG 6 1979
DEPT. MINERAL RESOURCES
PHOENIX, ARIZONA

Mr. John Jett
Department of Mineral Resources
Mineral Building, Fairgrounds
Phoenix, AZ 85007

Dear John:

As just discussed by phone, herewith are a couple of copies of a summary of data about our gold prospect.

Of the holes drilled in April-May, four found very good gold values. as can be noted on Cross-Section I. It is usually only in a prospector's dreams that values get better with depth in a gold property, but it seems to be happening here. Which is good, because we have little to no values at the surface. You may note in Cross-Section VI that we have in Hole 12, 8 consecutive 5-foot samples which tested .31, .28, 1.05, 19.11, 5.00, 1.17, .73, and .64 oz. Au.

If someone can make this into a producing property, it would be a classic reason for not withdrawing lands just because no one has found anything to date, or because someone in an office decides certain areas have no mineral potential. We've spent seven years on just several acres, to pinpoint the values shown on less than one, and still don't have all the answers.

As mentioned, some interest is developing in the property, but we do wonder if there isn't an Arizona-oriented company available.

With best personal regards.

Sincerely,

Al

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine: MYSTIC | Date: October 11, 1979

District: Pike's Peak (Morgan City) (Maricopa Cty) | Engineer: Ken A. Phillips KAP

Subject: Property Visit on Above Date

REFERENCES: Mystic Mine file, Arizona Department of Mineral Resources. (The property is well described in considerable detail in recent reports placed on file by Mr. Harding.)

PROPERTY VISIT: In the company of H. Mason Coggin, Consultant, and Albert Harding, Mine Owner, a visit was made to the Mystic Mine.

The property is in a complex of altered pre-cambrian gneisses and schists intruded by younger (larimide ?) andesites. The complex is overlaid to the west by tertiary-quaternary basalt flows. Mineral values are generally lacking at the surface but extensive drilling is reported to have delineated approximately 20,000 tons of gold bearing ore. The values appear to be confined to altered limonite stained andesite encountered in drill holes. The surface expression of the mineral values may be as a reddish color anomaly.

An exploration shaft was collared in 1978 but the hired crew abandoned the property and no work has been done on the shaft since. The collar of nearly all of the drill holes is identified on the ground.

KAP:mw

ALBERT ARDING
71 MAGNOLIA
CASPER, WYOMING 82601

CASPER, WYO.
SEP 14
PM
1978
82601

Mr. John H. Jett
Arizona Dept. of Mineral Resources
Mineral Bldg. - Fairgrounds
Phoenix, Az. 85007

September 20, 1978

Mr. Albert C. Harding
71 Magnolia
Casper, Wyo. 82601

Dear Al:

The State Mine Inspectors and one of his staff did foresee the need of a training agency for the benefit of small miners and the sand and gravel industry. As you know, the very large companies have training programs for their employees.

The Mine Inspector applied for a Federal Grant to set up such a training program specifically designed for other than majors. Federal funds have been appropriated to assist State programs with training of miners. However, ample funding is still tied up in legislature. I have been urging release of the funds. Would you mind if I use copies of your letter as a classic example of what we are trying to tell Washington?

Unfortunately Verne McCutehan, the State Mine Inspector died very recently. This may or could possibly have a detrimental affect on the planned program.

There are several mining engineers in the Casa Grande area, left over from the Hecla lay offs. One of them may be available.

A Mr. Mason Coggin may be able to provide some assistance. He is a registered engineer. I suggest when you get to Arizona, give me a call and I will give you Mr. Coggin's number and you can call him. He is in Phoenix.

I will look around and write you again later. It may be possible the Mine Inspectors Office may give some kind of training without a grant. I will check on this.

It will be nice to have you back in Arizona.

Sincerely,

John H. Jett,
Director

JHJ:gg

Enc.

ALBERT C. HARDING

SUMMER
71 MAGNOLIA
CASPER, WYO. 82601

OCT. THRU MAY
10026 MT. VIEW
SUN CITY, AZ 85351

March 31, 1978

4-3-78

Mr. John H. Jett, Director
Arizona Department of Mineral Resources
Mines Building - Fairgrounds
Phoenix, AZ 85007

Dear John:

Hi! You may remember - I think you have some information in your files - that for the last six years I've spent a lot of time and money on some mining claims north of here. I think I have a good gold prospect, and, if I were twenty years younger I'd hire one good miner and a couple of helpers and ramrod underground exploration myself. But, I know my physical limitations and I'm willing to turn it over to someone else, if I can get the right company interested.

It's not big enough for Homestake or Newmont, or anyone who thinks in terms of thousands of tons a day. If there are any small companies anymore, perhaps some of them have been in touch with your office. I've prepared a two-page summary and a cross-section of some drill holes, as enclosed, outlining a proposal whereby I would guarantee 'dry-hole' expense.

In effect, I'm willing to gamble $50,000 that if a company does some underground exploration that they would then want to exercise an option to lease. I'm proposing to reimburse such a company to that extent if they do enough work and then decide to drop it. The figures I propose per foot of shaft and driftwork are what I think I could do it for, or what someone else could do it for providing they didn't allocate too much supervisory and overhead expense to the job.

I'll be interested in any reaction you have about the project and my proposal - and the names of any companies you think might be interested.

With best regards.

Sincerely,

STATE OF ARIZONA
DEPARTMENT OF MINERAL RESOURCES
MINERAL BUILDING, FAIRGROUNDS
PHOENIX, ARIZONA 85007

File: Harding
Alpha "H"
Pend Reading

Mystic Mining Company (Mine File)

June 28, 1976

COPY

Mr. Albert C. Harding
71 Magnolia
Casper, Wyoming 82601

Dear Al:

Many thanks for the reports. They are a welcome addition to our files.

I have mailed you, under separate cover, the following publications:

1. Pertinent Data for New or Prospective Mining Operations in Arizona.

2. Directory of Agencies (of interest to the mining sector in Arizona).

Unless you are on Forest Land, State land, or going to mine a leasable mineral, you do not have to file an environmental plan. However, you should check if ground water pollution may exist.

Your permit to buy and store explosives can be obtained from the U.S. Treasury Department. I have heard that MESA now has permits. This should be checked. I have just checked this. It is not true. MESA does field and check work for the Treasury Department relating to explosives, but the Treasury Department still issues the permit.

It takes only one employee (other than yourself) to get involved with Workmen's Compensation.

You get involved in safety examinations as soon as you file with the Mine Inspector's office.

An operating mine goes on tax rolls when it ships ore. They are taxed at State level. Non-operating mines are taxed at local level and usually on improvements only.

You would have to write directly to the smelters to obtain smelter schedules. We use to try and keep this, but it is an ever-changing thing we no longer do. I have enclosed an Active Mines List with the other publications. It lists the smelters.

Let me know if I can be of any further help.

Best regards,

John H. Jett
Director

JHJ:pp

ALBERT C. HARDING

71 Magnolia
Casper, Wyoming 82601

~~10026 Mt. View Rd.~~
~~Sun City, Ariz. 85351~~

June 12, 1976

RECEIVED
JUN 14 1976
DEPT. MINERAL RESOURCES
PHOENIX, ARIZONA

Mr. John Jett
Department of Mineral Resources
Mineral Bldg., Fairgrounds
Phoenix, Az. 85007

Dear John:

Would appreciate some information about mining in Arizona if you or some one else has time to provide it, information applicable not only perhaps to the potential property we have , but also wanted for a book I am now writing.

1. What agencies or departments have to get involved at what stage in opening up a new property?

When do you have to file environmental plans and with whom?

How many employees do you need before you get involved with Workmen's Compensation, etc.?

How do you go about getting a license these days to buy and store explosives?

When do you get involved with safety examinations by federal and state inspectors?

2. At what point does a prospect or a mine in development or production start getting assessed for taxation, and what is the basis for a mine with unknown reserves?

That type of information you may already have or want to have available for others. There is one other area in which I am currently interested:

3. Do you have any information such as purchasing schedules of Arizona ore buyers or smelters, especially applicable to gold ore trucked to such buyers?
Percentage of assay values paid for?
Sampling procedures?
Deductions for moisture, unwanted elements, etc?

I'll be grateful for any help you can provide along the lines of the requested information.

Sincerely,

Al Harding

ALBERT C. HARDING

71 Magnolia
Casper, Wyoming 82601

~~10026 Mt. View Rd.~~
~~Sun City, Ariz. 85351~~

June 12, 1976

RECEIVED
JUN 1 6 1976
DEPT. MINERAL RESOURCES
PHOENIX, ARIZONA

Mr. John Jett
Department of Mineral Resources
Mineral Bldg, Fairgrounds
Phoenix, Az. 85007

Dear John:

Enclosed herewith is a copy of my report on what I believe is a potentially good gold prospect in Maricopa County. It is the same property which Bob Lehner visited a couple of years ago, but at the time of the visit we hadn't found the gold ledge which is now our main area of interest.

I have provided copies to a number of the larger companies in Arizona, but from reaction to date expect it is not yet large enough for such companies. If no dependable company gets interested before I return to Arizona in the fall I will plan on drilling a half-dozen or so angle holes to try to expand the tonnage potential.

Best regards.

Sincerely,

Al Harding

See Harding correspondence file
PP 6/29/76

12-26-73

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Mystic Mining Co - (Harding property) Date December 19, 1973

District Pikes Peak(southeastern end of Heiroglyphic Mtns) Engineer R. E. Lehner

Subject: Mine visit

Location: Secs 11,12 T5N R1W. (Approximately 9 miles N. of Sun City, Maricopa County; follow 107th Avenue to north).

Owner: Mr. Al Harding (Mr. Leith Pike, Partner)
Sun City, Arizona - phone: 933-2628

Property: 12 lode claims (Q#1 to Q# 12); also 1 leased lode claim-Gunbolt. (Stevenson & White own adjacent claims to SE near Caterpillar tank).

Background: Mr. Harding is a mining engineer who has operated a bentonite quarry in Wyoming, and being successful has taken an early retirement and spends the winters in Sun City, Arizona. As a hobby, he and his partner have gone prospecting and the nearest area to their home which exhibits mineralization is an area in the southeastern end of the Heiroglyphic Mtns., just nine miles north of their home. Recognizing a potential for mineralization where mineralized fissures and veins in Precambrian schist project beneath gravel cover, they staked lode claims over the area and established a land holding position. Harding and his partner, Pike, organized themselves as the Mystic Mining Company and applied for an OME loan. Their application was approved in 1972 and they received $20,000. This amount paid for four holes; the cost of the rest of the drill holes (about 28) has been self-financed.

Mr. Harding has visited the Department office in Phoenix on various occasions to review the files and literature that might yield data relating to his property. Several things have puzzled him about the mineralization in the area and it was arranged through the Director, Mr. Jett, that I contact Harding and set up a field appointment to visit the property and try to help him. This was done and the property was visited on Dec. 19, 1973.

Geology and Mineralization: There is no geologic map of the area other than the State geologic map which is generalized and which lacks pertinent details. Essentially, Precambrian rocks consisting of schist, rhyolite and granitic rocks have been eroded down to a rather level surface. Upon these rocks have been deposited volcanic tuffs and andesitic or basaltic flows of Cretaceous or Tertiary age. Subsequent erosion has incised these rocks so that the higher hills are composed of the volcanic rocks and the Precambrian rocks are exposed chiefly in the drainages of the area. Colluvial and alluvial detritus cover the lower inter-drainage areas.

The Precambrian rocks are the chief rocks to be concerned with because the mineralization is restricted to them. Tentatively, there are three types in the area: (1) a dark colored and schistose unit closely resembling the Pinal schist which is mineralized; (2) a red rhyolite which is in fault contact with the schist and which is unmineralized, and (3) a granitic rock which is deeply weathered and decomposed.

The schist contains parallel or en-echelon mineralized fissures and vein material that

that strike N. 60° W. and dip S. 60° -80° W. The vein and fissure filling appears to be mainly calcite and manganese. Workings along these zones consist of open trenches, tunnels along strike,and vertical and inclined shafts. The exploration activity by Harding consists of three lines of drill holes normal to the strike of the vein which progressively explore the vein or fissure zonesat greater depth. There is a row of close-spaced holes on the western part of the property from NE to SW - Nos. 1, 2, 3, 4, 9 & 6; on the eastern part of the property - Nos. 7, 8, 10, 11; and in the middle of the property Nos. N, I, O, K, P, H, G, M, Q, J, 14, 13, & 15. The last hole # 15 is currently being core drilled to a depth greater than 900 ft. in order to test the sulfide zone of the fissure.

The fissure or vein zone varies in thickness from several feet to several tens of feet and is typical of such in the Precambrian where they pinch and swell. Metallic values in this zone average 3-1/4% lead & zinc (combined), 0.1 oz of silver, 0.01 oz. of gold, and (?) copper from assays acquired by Harding. He states that the combined metal values averaged from 28 drill holes would be $7.70.

Mr. Harding mentioned that oxidation extended to the water table which is at a depth of about 300 feet, but a few holes contained oxidized material as deep as 600 feet. This is not unusual in the Basin and Range province in Arizona where there has been much changing in the base level caused by faulting, damming, etc. and thereby causing a fluctuating water table.

Another concern of his was why zinc should remain in the oxide zone (1.79%) when it is one of the most soluble of minerals. Zinc can be stabilized in the oxide zone in the form of smithsonite (zinc carbonate) or as a zinc silicate. Because calcite is a common gangue mineral in these fissures in the schist, a carbonate source is readily available. Lead, although resistant to leaching, does oxidize to a sulphate. The carbonate gangue would tend to neutralize any acids developed by oxidation and minimize leaching. Therefore it would seem that the grade of ore in the oxide zone may be about what would be expected in the sulfide zone.

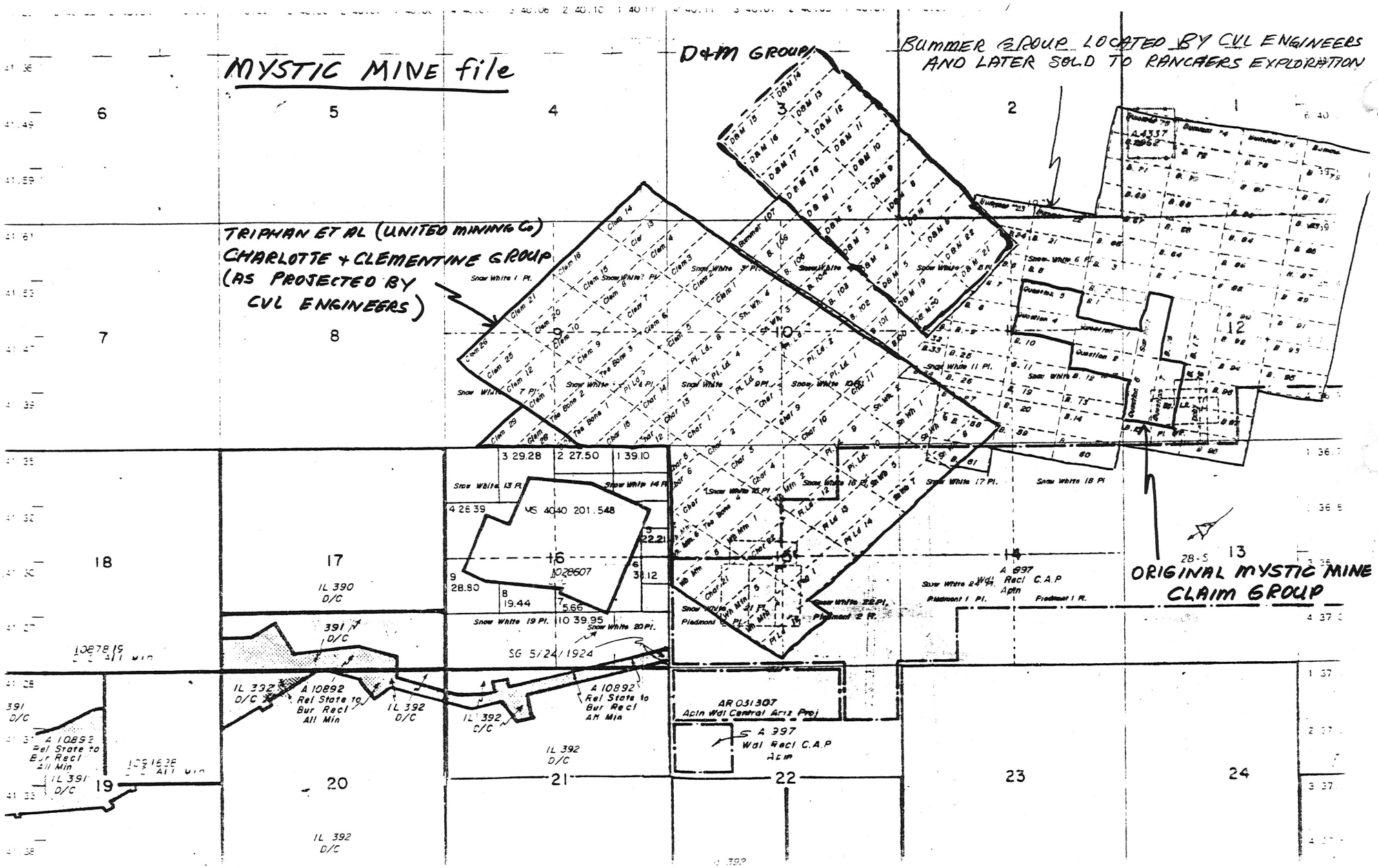
One of the problems for Mr. Harding to be concerned with is what to do with lead-zinc ore if he should discover a commercial quantity. There seem to be no smelters available which would accept this ore at the present time.

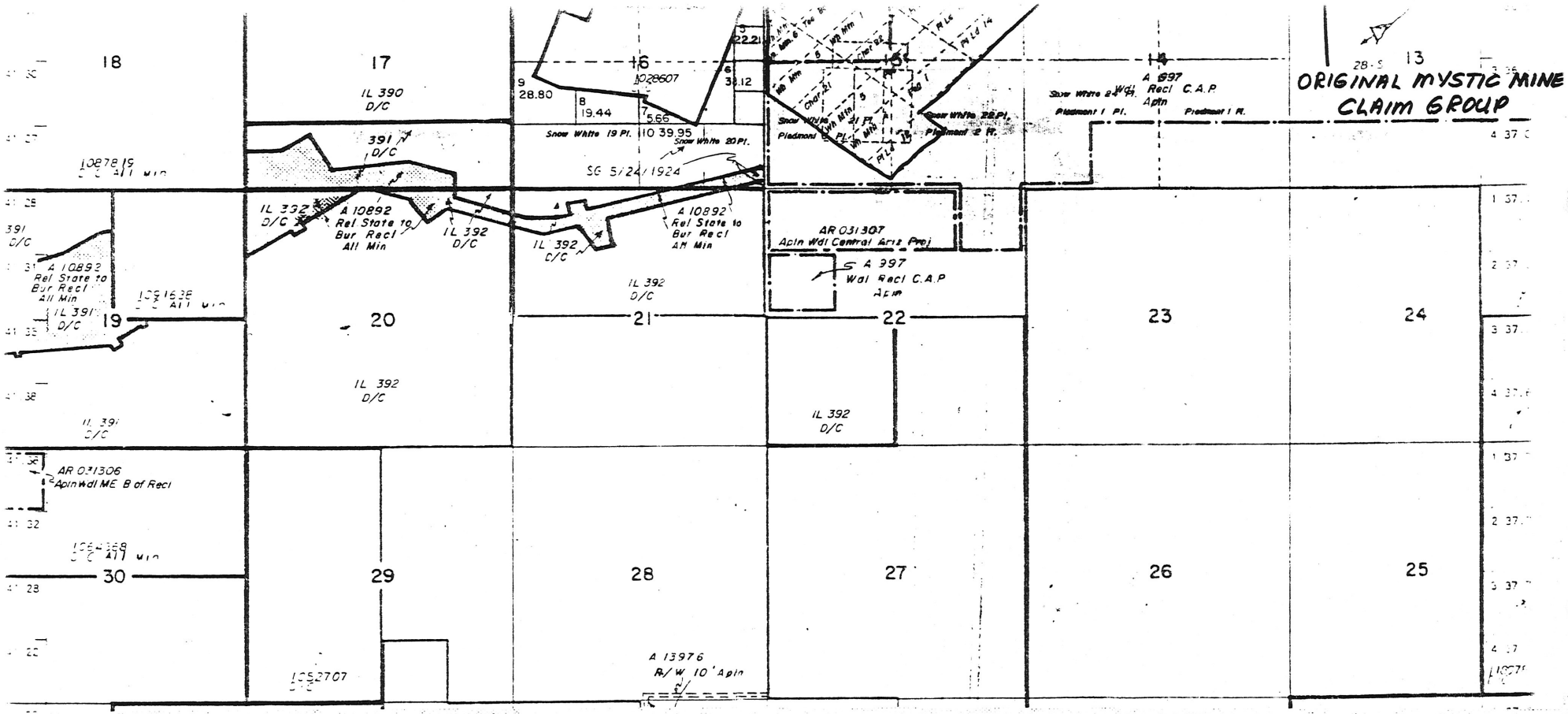
The first 10 holes were cored with BX size drill, but the oxidized mineral zone made poor recovery so they switched to hammer drilling, recovering the cuttings by air. When the water table is reached they cased down to it and core drilled with N.Q. size core barrel. The Wayne Shelton Drilling Co. of Phoenix is the drilling contractor. The hammer drilling is costing $5/ft and the core drilling is costing $9.75/ft.

<u>REMARKS</u> Mr. Harding is not ready to present his property or data to a company or other concerned parties until they are aware of what the deeper sulfide potential holds for them.

Top Part

1 of 2





Bottom Part

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